



DELHI TECHNOLOGICAL
UNIVERSITY

7th ANNUAL REPORT

7 वाँ वार्षिक प्रतिवेदन

2020-2021



(01 अगस्त, 2020 - 31 जुलाई, 2021)
(01 August, 2020 - 31 July, 2021)

DELHI TECHNOLOGICAL UNIVERSITY

LEGEND

- ACADEMIC
- HOSTELS
- SPS
- WORKSHOP
- AUDITORIUM
- CANTEEN/ MESS
- LIBRARY
- ADMIN BLOCK
- GYM
- INTERNATIONAL AFFAIRS
- HOSPITAL
- INDOOR SPORTS HALL
- FOOTBALL GROUND
- RUNNING TRACK
- ATM
- BASKETBALL COURT





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दिल्ली प्रौद्योगिकी विश्वविद्यालय

(Formerly Delhi College of Engineering)

Established by Govt. of NCT of Delhi vide Act 6 of 2009

Bawana Road, Delhi-110042

उपराज्यपाल
दिल्ली
LIEUTENANT GOVERNOR
DELHI



राज निवास
दिल्ली-११००५४
RAJ NIWAS
DELHI-110054



MESSAGE

I am pleased to learn that the Delhi Technological University (DTU) is publishing its annual report for the academic year 2020-2021. DTU (Erstwhile Delhi College of Engineering) has a glorious past of more than 80 years and is widely acclaimed for its excellence in education, research & training.

An educated and skilled human capital is the propelling force of a nation. It is appreciable that the DTU has been imparting quality education through the years and is constantly evolving through collaborative MoUs with institutions of national & international repute. I am certain that the graduates of DTU will continue to contribute significantly towards building the Indian economy and society in myriad ways.

I extend my heartiest congratulations and best wishes to the faculty, students and staff of the DTU on this occasion and wish them the very best in their future endeavours.

(Anil Baijal)

ARVIND KEJRIWAL
CHIEF MINISTER



GOVT. OF NATIONAL CAPITAL TERRITORY OF DELHI
DELHI SECRETARIAT, I.P. ESTATE,
NEW DELHI-110002
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D.O. No.: 05DCMI/29

Date.: 10/12/2021

MESSAGE

It gives immense pleasure to learn that the Delhi Technological University is publishing its annual report for the Academic Year 2020-21. I extend my best wishes to all the stakeholders for their truly magnificent achievement.

I believe our future success will be defined in part by our ability to contribute to the solution of society's most daunting problems, bringing to bear the full intellectual might of our academic breadth and depth. In a nation that requires rapid modernization along with sustainable development, a workforce comprising of youth that excels in their respective fields with technical acumen, flair, quality consciousness, and awareness, shall go a long way. DTU's recently launched initiative and new endeavours will surely unleash faculty and students' creativity in innovative ways.

There is no question that 2020-21 has been an extraordinary year for the world and we all had to adapt to living our lives very differently. The education in DTU over this time has gone through many innovations with technological advances and globalization. I feel proud to see that the DTU is adapting to these transformations.

I am happy to note the significant progress and growth of DTU in the last few years. I am happy that DTU is taking steps to protect the future of humanity through education. I congratulate the Vice-Chancellor and his team involved in the compilation of the annual report. I wish high success to the faculty members, staff and students of the DTU.



(Arvind Kejriwal)

MANISH SISODIA

मनीष सिसोदिया



DEPUTY CHIEF MINISTER
GOVT. OF NCT OF DELHI
उप मुख्यमंत्री, दिल्ली सरकार
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D.O. No. _____

Date : December, 2021

MESSAGE

As Delhi Technological University publishes its annual report for the Academic year 2020-2021. It gives me immense pleasure to behold yet another year of achievements by achieving an immensely important milestone in the journey of Delhi Technological University to success. I congratulate all stakeholders in their efforts to make this day possible. This is certainly a moment of great pride for the faculty members, students, and their family members and friends.

It is a matter of great pride to witness the evolution of students of Delhi Technological University into skilled and qualified professionals by overcoming the difficulties that arose due to the COVID-19 pandemic. It is my fervent hope that the remarkable accomplishment of students and the administration in this academic year in DTU will be not merely a momentous occasion in their lives, but one that will contribute to their vision for change in the world. It is incumbent upon all of us to contribute to this great nation and its development with all our hearts, knowledge and skills.

I congratulate all the stakeholders of DTU involved in the compilation of the annual report. I wish high success to the faculty members, staff, and students of the university.

(Manish Sisodia)

R. Alice Vaz, IAS
Secretary



राष्ट्रीय राजधानी क्षेत्र, दिल्ली सरकार
Government Of National Capital Territory, Delhi
प्रशिक्षण एवं तकनीकी शिक्षा विभाग / उच्च शिक्षा
Department of Training & Technical Education /
Higher Education
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D.O. NO. : PPS|SECY|TTE|2021|66

दिनांक:

Date : 15.12.2021

MESSAGE

Delhi Technological University is the premier Engineering and Technology Institution in India and has always been the alma mater to generations of top-quality engineers through a combination of their hard work, dedication and technical skills in science, technology engineering and management. The DTU alumni have been a dominant work force in many domains all over the world. I believe that the bonus to uphold the invaluable legacy of DTU lies in its alma mater who has graduated in the past, those who are graduating today, and those who will graduate in the future. I am sure that they will surpass the expectations of all stakeholders in their future professional lives.

I am happy that DTU is marching towards its vision to become a global leader in education, research, and innovation. I appreciate that the DTU has mastered the challenges of the COVID pandemic extremely well. I congratulate the Vice-Chancellor and his team involved in the compilation of the annual report. I wish every success to all faculty members, staff, and students of the DTU.

(Ms. R. Alice Vaz)
Secretary (DTTE)





VISITOR

His Excellency Shri Ram Nath Kovind
President of India



CHANCELLOR

Hon'ble Shri Anil Bajjal
Lt. Governor, Govt. of NCT, Delhi



Shri Arvind Kejriwal
Hon'ble Chief Minister
Govt. of NCT, Delhi



Shri Manish Sisodia
Hon'ble Deputy Chief Minister and Minister
for Training & Technical Education
Govt. of NCT, Delhi



VISION, MISSION & QUALITY POLICY

VISION



QUALITY POLICY

The university is committed to achieving global standards of excellence in the field of Science, Technology, Management and allied areas by disseminating knowledge through cutting-edge research, education and innovation. We adopt best practices to maintain high standards in the core and allied functions through continuous evaluation and improvement of our processes.

CORE VALUES

Integrity

We do what we say through trust, transparency and honesty.

Compassion

We foster civilized mindset for kindness, consideration and benevolence.

Commitment

We dedicate ourselves completely to all our endeavors.

Creativity

We nurture innovation, imagination and ideation.

Collaboration

We promote team work through togetherness, harmony and acknowledgment.

Inclusion

We embrace diversity with respect, acceptance and affirmation.

ROADMAP FOR ACHIEVING VISION



Strengthening Education

- Flexible Curriculum
- Outcome-based education
- Focus on research, innovation & Entrepreneurship
- Project and Experiment based learning



Product Development & Entrepreneurship

- Incubation & Innovation Foundation (19 companies working currently)
- Product & Entrepreneurship
- Track introduced in UG & PG curriculum



Collaboration & Creativity

- Research Excellence Award & Grants for researchers
- MoUs with leading industries and universities
- Research Track introduced in PG & UG Curriculum



Ethics & Integrity

- FECs on values, ethics and sports
- Regular workshop on ethical values, professionalism
- Training programs for development of analytical abilities & critical thinking



Historical Background

Delhi Technological University (DTU) is a non-affiliating, teaching and research University at Delhi to achieve excellence in science, engineering, technology, management and allied areas. The university enables students to face the wide-ranging changes taking place in the fields of science, technology, environment and management. This includes innovation, design, development, construction, production, managerial and entrepreneurial activities. The University lays great emphasis on assisting students in the development of national character, self-confidence, leadership and fostering an ecosystem for creativity and imagination.

This institute was initially established in the name of Delhi Polytechnic in the year 1941 and was renamed to Delhi College of Engineering in 1965. In 2009, Delhi Technological University was reconstituted from Delhi College of Engineering by the Government of NCT of Delhi vide Act 6 of 2009. The university has an illustrious history spanning over 80 years.

The newly established East Delhi Campus of DTU has been functional since the 2017-18 academic session. It is located at Vivek Vihar, Phase II, Delhi. This campus endeavors to provide quality education, research, and innovation in the emerging areas of management and entrepreneurship relevant to industry and society.

This premier institution is globally well-known for its outstanding education, research, and innovations. The university currently offers various interdisciplinary and industry relevant programmes in science, technology, management, and allied areas at both the undergraduate and postgraduate level. The university has established a strong academia-industry interface and has collaborations with reputed research organizations, industries, and premier institutions across the globe. Many alumni of this institute have excelled at home and abroad through their contributions to the profession of engineering. They have brought high honour and enhanced the dignity of engineering fraternity. In fact, the DTU is a highly preferred choice of the meritorious students in the country. With its illustrious history, strong alumni power worldwide, profound contributions to the growth of quality human capital in engineering and technology and a campus vibrant with technology innovations unleashing the enormous power of creativity of the talented new generation professionals. DTU has earned the reputation of being one of the premier University of Technology in the country and abroad.



Sustainability

- Green Campus
- Zero Discharge Campus
- Sewerage Treatment Plant
- Solar Power Plant
- Organic to Waste Energy Plant

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PROGRAMS

B. TECH PROGRAMS

- Chemical Engineering
- Mathematics and Computing
- Engineering Physics
- Biotechnology
- Civil Engineering
- Civil Engineering (Cont. Edu.)
- Computer Engineering
- Software Engineering
- Electrical Engineering
- Electrical Engineering (Cont. Edu.)
- Electronics & Communication Engineering
- Electronics & Communication Engineering (Cont. Edu.)
- Environmental Engineering
- Information Technology
- Mechanical Engineering
- Production & Industrial Engineering
- Mechanical Engineering with Specialization in Automotive Engineering
- Mechanical Engineering (Cont. Edu.)

M. TECH. PROGRAMS

- Polymer Technology
- Nano Science & Technology
- Bioinformatics
- Industrial Biotechnology
- Geotechnical Engineering
- Hydraulics & Water Resources Engineering
- Structural Engineering
- Geoinformatics
- Computer Science & Engineering
- Software Engineering
- Information System
- Microwave & Optical Communication Engineering
- Signal Processing & Digital Design
- VLSI Design and Embedded System
- Control & Instrumentation
- Power System
- Power Electronics and Systems
- Environmental Engineering
- Production Engineering
- Thermal Engineering

OTHERS PROGRAMS

- BBA
- BA-Economics (Hons.)
- B. Des.
- MBA Innovation, Entrepreneurship and Venture Development
- MBA Business Analytics
- Master of Business Administration (USME)
- MBA Family Business & Entrepreneurship
- Master of Business Administration (Executive)
- Master of Business Administration (DSM)
- M.Sc. Mathematics
- M.Sc. Physics
- M.Sc. Biotechnology

ANNUAL REPORT : AT A GLANCE

2020 - 2021

DEPARTMENTS/CENTRES/UNITS

Academic Departments/Centres	16
Service Centres/Other Units	13

GRANTS

Govt. of NCT, Delhi Grant In Aid
(GIA) : ₹ 28,00,00,000/-

STUDENTS ADMITTED

B. Tech.	2387+152*
B. Tech. (Lateral Entry)	17
B. Tech. (Continue Edu.)	114
B.Des.	83
BBA	182
BA-ECONOMICS	152
M. Tech.	322
MBA	166
MBA (IEV)	15
MBA (BA)	29
MBA (FBE)	8
MBA (Executive)	37
M.Sc.	120
Ph.D.	231

Total **4,015**

*Supernumerary: DASA / ICCR / SII / DTU Portal / PMSS

STUDENTS STRENGTH

B. Tech.	8859
B. Tech. (Continue Edu.)	598
B.Des.	227
BBA	483
BA-ECONOMICS	443
M. Tech.	658
M. Tech. (PT)	35
MBA	413
MBA (IEV)	31
MBA (BA)	55
MBA (FBE)	19
MBA (Executive)	86
M.Sc.	226
Ph.D.	1337

Total **13,470**

FACULTY/STAFF STRENGTH

Academic Staff	330
Non-Academic Staff	110

Total **440**

NUMBER OF DEGREES AWARDED

B. Tech.	1847
B. Tech. (Continue Edu.)	194
BBA	100
BA-ECONOMICS	113
M.Tech.	262
M.Tech. (PT)	12
MBA	128
MBA (BA)	16
MBA (Executive)	41
MBA (IEV)	15
MBA (FBE)	11
M.Sc.	91
Ph.D.	55

Total **2,885**

CONSULTANCY PROJECTS

Number of Projects	15
Outlay (₹) 1,42,70,643/-	
MoU	4

SPONSORED RESEARCH PROJECTS

Number of Projects	6
Outlay (₹) 23,95,64,270/-	

RESEARCH PUBLICATIONS

Journals	543
Conference/Symposia	386
Patent Published	16
Book Chapters	25

Total **970**

OUR VISIONARY LEADERS

HON'BLE CHANCELLORS

SHRI TEJENDRA KHANNA
July 2009 to July 2013



SHRI NAJEEB JUNG
July 2013 to Dec. 2016



SHRI ANIL BAIJAL
Dec. 2016 to till date



VICE CHANCELLORS



Prof. P.B. Sharma
July 2009 to July 2014



Prof. Pradeep Kumar
Aug. 2014 to Sept. 2015



Prof. Yogesh Singh
Sept. 2015 to Oct. 2021



Prof. J. P. Saini
Oct. 2021 to till date

Vice Chancellor's REPORT



Delhi Technological University (Erstwhile Delhi College of Engineering) has a glorious past of more than 80 years and is widely acclaimed for its excellence in education, research & training. DTU's transformation from Delhi Polytechnic to Delhi College of Engineering and Delhi Technological University has taken an astounding shape and the autonomy granted to it has spurred progress in several uncharted territories. The various transformations have helped us to remain young and energetic in our endeavour for academic excellence.

With an illustrious history of over 80 years in providing technical education within modern educational infrastructure, DTU is an institution defines and continues to update frontiers of Science, Technology and Management. DTU is fully networked with the Industrial, Academic & Scientific community. It has partnerships with leading universities and industries in India & abroad. DTU has the alma mater of a highly distinguished pool of world class engineers, technologists and entrepreneurs naming few Mr. Vinod Dham, the father of the Pentium Chip, Mr. Promod Haque, the world's most widely acclaimed Venture Capitalist, Mr. Raj Sojn, the Avionics wizards of US & a top ranking Techno Entrepreneur, Durgadas Agrawal, the renowned Techno-Entrepreneur based in Houston, Dr. D. Yogi Goswami (Director, Clean Energy Research Center at the University of South Florida), Ashok K. Baweja (Head, QuEST Global Defence Engineering Services), Sanjay Nayar (CEO, Kohlberg Kravis Roberts India Advisors Pvt. Ltd.), to name a few. Delhi Technological University has been the pioneer of Quality Technical Education Research and Innovation.

Our university has kept the quality of education & research as its main focus of academic and professional activities, and this has earned us a high reputation in the country and abroad. This is evident from DTU figuring several times among the top ten engineering institutions in the country, along with the prestigious IITs. Delhi Technological University has taken several new initiatives in restructuring and strengthening its academic programmes at

Postgraduate and Undergraduate levels during the years. Introduction of new programs at the postgraduate level and focus on research and development are crucial factors that have helped in the recognition of DTU as a premier university for higher learning. The university has emerged as the leading technological university for higher technical education and research in the country. DTU continues to be the one of the most sought-after destinations for undergraduate and postgraduate studies and attracts the top performers in national examinations such as JEE (Mains) and GATE.

We are aware of the enhanced expectations of the student community and public at large and strive to live up to our image that has been so persistently built up over the years. We at DTU are committed to achieve our goals to create an environment in which we can nurture our students to be knowledgeable, innovative and trained to work unceasingly to serve the nation and society. The development of the nation depends upon their technical competence and work ethics that they have imbibed during their formative years as students. We are focused to keep pace with the continual progress in the fields of science and technology. The characteristics of the student population at the university are undergoing a significant change in recent times. The university has responded pragmatically to the large increase in its intake by substantially reorienting itself academically, technologically and administratively and using it as a great opportunity to retain its leadership in engineering education in the country. The undergraduate curriculum for engineering education is designed in such a way that it introduces a new rigor and methodology in undergraduate teaching, laying emphasis on developing analytical skills and challenging the students intellectually. The university currently offers 14 B.Tech., 20 M.Tech., 3 M.Sc., M.B.A., B.Des., B.Tech. (Evening), BBA, BA (Economics), MBA (Business Analytics), Executive MBA and Ph.D. programs. Keeping the demand for specialization in entrepreneurship and innovation in view, the East Delhi Campus of the University has started two new programs this year, M.B.A. Innovation, Entrepreneurship & Venture Development and M.B.A. Family Business & Entrepreneurship. These programs will energize and enhance entrepreneurship skills of students and provide them facilities and opportunities to become a successful entrepreneur.

Admissions

In the year 2020-21, admission to the B.Tech. programmes at Delhi Technological University were conducted through common counseling, Joint Admission Counseling (JAC), along with three other technical universities/ institutes viz. Indira Gandhi Delhi Technical University for Women (IGDTUW), Netaji Subhash University of Technology (NSUT) and Indraprastha Institute of Information Technology Delhi (IIITD). In this way 2387 students take admissions in B.Tech. at DTU through common counseling. The admission to the category PIO/ FN/ NRI / has been conducted through DASA and 143 students were admitted this year. Total of 09 students were admitted under PMSS in B. Tech. 17 students take admissions through lateral entry and 114 students take admissions in B.Tech. continue

education. A total of 182 students were admitted in BBA, 152 in BA-Economics (Hons.), and 83 in B.Des. In 2020-21, a total of 2670 Undergraduate students were admitted in the year 2020-21. A total 322 students were admitted in M. Tech. and 350 students were admitted in various MBA programs. The total postgraduate admissions in 2020-21 are 792. In 2020-21, 231 Ph.D. scholars were admitted. Delhi Technological University has been selected as Mentor Institute for the TEQIP-III Project for Mentee Institute Madhav Institute of Technology and Science, Gwalior w.e.f. 1st April, 2017 and shall conclude by 30th September, 2021. The institute is covered under Sub-component 1.3: Twinning Arrangements to Build Capacity and Improve Performance. All Post graduate and Ph.D. students involved in research are given the opportunity to interact with the research community at the National and International level by providing funds to attend International/National Conferences through TEQIP-III. The research scholars are the primary beneficiary of TEQIP-III scheme, however a good number of PG and UG students have also been benefited.

Training and Placement

With the mission of providing leading industries with the brightest minds of the country DTU entered the 2020-21 placements seasons with confidence. The process began in June 2020 by sending invitations to companies to visit the University for pre-placement talks and provide their job announcements. The talks provided an avenue for interaction and familiarization of students with the recruiting organizations and their work profile. In the academic year 2020-21, a total of 345+ recruiters took part in campus placements and offered 1474 jobs to B.Tech, MBA, B.Tech.(E), BBA/BAE and M.Sc. Programs. Highest salary package offered was 1.12 Crores by Amazon in the year 2020-21. Students from B. Tech, M. Tech, MBA programs in various fields of engineering and technology, participated in the placement process. The students who have passed out of DTU are studying in various prestigious National and International institutes such as IIM's, IIT's, Carnegie Mellon University, Columbia University, Duke University, Purdue University and University of California.

Continuing education and outreach program

Continuing Education Programme (CEP), Quality Improvement Programme, Curriculum Development Programme and Faculty Development Programme (FDP) activities continued to attract wide interest from industry, academia and from our own faculty. The CEP courses at DTU, aim at working professionals, and have sustained its significant activities despite the challenging industrial scenario prevailing throughout this period. The FDP programs, sponsored by TEQIP-III at DTU are meant for faculty. These courses are very popular, and a large number of college teachers are benefited from them. With a view of having more interactions between industry professionals and teachers, special attempts have been made to open up the FDP programs to college teachers and industry professionals. This has been found to be a very worthwhile experience for the teachers and the industry personnel.

Faculty Centric Policies

Professional Development Fund Grant was granted to faculty with initial grant of 2 Lakhs for faculty creation and 2 Lakhs grant every three years for attending conferences, workshops and training programs. Career Advancement Scheme is done on a continuous basis and numerous promotions have been granted. Various awards for Excellence in Teaching were given to the faculty. The university offers three categories of awards annually.

DTU Innovation and Incubation Foundation

The university has established the DTU Innovation and Incubation Foundation. The aim of the DTU Innovation and Incubation Foundation is to create a culture of entrepreneurship, startups, and Intellectual Property Creation that leads to value creation, jobs, and employment, and does social and economic benefits by creating a robust ecosystem.

Outreach and extension

The university has also established centers like Center of Outreach & Extension Activities and Center of Human Resource Development. Several schemes based on social entrepreneurship have been implemented by the University. The schemes will include Digital literacy, E-waste collection, Water filtration units set up, Health camps, Blood donation camps, Organ donation camps, Cloth donation camps, awareness camps on depression and thalassemia, training workshops for acid attack survivors, skill development for women, recycling of biodegradable waste into useful manure and cleanliness drive. In addition to it, the National Service Scheme (NSS), NSS-DTU provides an extended dimension to the higher education system and orient the students towards community service while they are studying in the institution, and to establish a meaningful linkage between the campus and the community.

Cultural Sports and Technical Festivals

DTU has a rich culture of sports and technical activities. Many events are regularly organized for student engagement such as the Entrepreneurship Cell of Delhi Technological University organized its annual 'Techstars Startup Weekend' powered by Google for Startups from 23rd to 25th October 2020. Startup Weekend provides a platform that allows the early stage Startups to take giant leaps in the business world and lay the foundation of their dreams with like-minded people. The participants are expected to turn their idea into reality in 54 hours. The Student Sports Council of DTU organized a "Pandemic Fitness Run" for the students of DTU on 2nd March 2021 at the DTU Sports Complex. This unprecedented situation has made all of us lethargic and keeping up with our physical health has become a major task. The pandemic fitness run aims to promote the importance of physical fitness in this pandemic situation and rejuvenate all the students after a long fitness break. NSS DTU also initiated the project "Koshish" in June 2021. Koshish is an initiative in collaboration with "Koshish-Umrao Singh Educational Society", aiming to benefit underprivileged children

by enlightening their minds with good quality education. This is an effort to transform their lives by giving them an opportunity to enhance their knowledge and to make them competent for future challenges.

DTU Rankings

Delhi Technological University was ranked 2nd by Times Engineering Rankings 2021. India Today's Best Engineering Government Colleges survey for 2021 has ranked DTU at the 7th position. The 2021 NIRF Engineering rankings placed DTU at the 36th position. DTU is placed in the bracket of (801-1000) in Times Higher Education World University Ranking, 2021. The university has been accredited "A" grade by NAAC. University through Internal Quality Assurance Cell (IQAC) has initiated many activities for quality improvements such as ISO 9001:2015 certification, regular audit of processes as per SOP, Question paper standardization and audit, feedback collection and analysis, green audit of the campus, ERP & e-governance application in the processes etc.

DTU is grateful to the financial support provided by GNCTD, MHRD, DST, AICTE, UGC, CSIR, DBT and DRDO. My sincere thanks to all the faculty members, employees, students and alumni for their devotion and hard work invested in DTU. Over the years, DTU has contributed significantly to the national cause of providing excellent technical education and will continue with this same tradition in the coming years. I am deeply indebted to the Hon'ble Chancellor, Shri Anil Bajjal, Lieutenant Governor of NCT of Delhi, Hon'ble Chief Minister, Shri Arvind Kejriwal, Hon'ble Deputy Chief Minister and Minister of Higher and Technical Education Shri Manish Sisodia, for their guidance, support and cooperation which enables DTU to attain its goal. I take this opportunity to thank the Chief Secretary, Principal Secretary (Finance) and Principal Secretary (Higher Education) and Director DTTE Govt. of NCT of Delhi for their cooperation and support in the development of DTU. My sincere gratitude to the Members of the Board of Management, Finance Committee, Planning Board, Academic Council and other Committees of DTU for their valuable contribution which enables DTU to achieve its mission. I compliment the editorial team of IQAC for their untiring efforts which were invested in compiling this report.



Prof. J.P. Saini
Vice Chancellor

DELHI TECHNOLOGICAL UNIVERSITY



1 Organization and Administration

1.1 University Court

S. No.	NAME	Designation	Position in the Court
1	Sh. Anil Bajjal	Hon'ble Chancellor/L.G., Delhi	Chairperson
2	Prof. Yogesh Singh	Vice Chancellor, Delhi Technological University	Member
3	Principal Secretary/ Secretary (Finance)	Govt. of NCT of Delhi, Delhi Secretariat, I.P. Estate, New Delhi 110002	Member
4	Principal Secretary/ Secretary (Training and Technical Education)	Govt. of NCT of Delhi, Muni Mayaram Marg, Pitam Pura, Delhi 110088	Member
5	Principal Secretary/ Secretary (Higher Education), Directorate of Higher Education	Govt. of NCT of Delhi, B-Block, 5, Sham Nath Marg, Delhi-110054	Member
6	Prof. Himanshu A. Pandya	Vice Chancellor, Gujarat University, Navrangpura, Ahmedabad, Gujarat 380009.	Member
7	Prof. R.C. Kuhad	Vice Chancellor, Central University, Jant, District Mahendragarh, Haryana 123031.	Member
8	Prof. Rajeev Tripathi	Director, Motilal Nehru National Institute of Technology, Allahabad, Teliargunj, Prayagraj, Uttar Pradesh- 211004.	Member
9	Prof. Lalit Awasthi	Director, National Institute of Technology, Grand Trunk Road, Bye pass, Jalandhar, Punjab 144011.	Member
10	Prof. M.N. Doja	Director, Indian Institute of Information Technology, Sonapat, Haryana 131021.	Member
11	Prof. Bhim Singh	Deptt. of Electrical Engineering, IIT, Hauz Khas, Delhi 110016	Member
12	Prof. Dileep N. Malkhede	Advisor-I, AICTE, Nelson Mandela Marg, Vasant Kunj, New Delhi 110067	Member
13	Prof. Samsher	Registrar, Delhi Technological University	Member Secretary

1.2 Board of Management

S. No.	NAME	Designation	Position in the Board
1	Prof. Yogesh Singh	Hon'ble Vice Chancellor, Delhi Technological University	Chairperson
2	Principal Secretary/ Secretary (Finance)	Govt. of NCT of Delhi, Delhi Secretariat, I.P. Estate, New Delhi-110002	Member

S. No.	NAME	Designation	Position in the Board
3	Principal Secretary/ Secretary	Training and Technical Education, Govt. of NCT of Delhi, Muni Maya Ram Marg, Pitam Pura, Delhi 110088	Member
4	Principal Secretary/ Secretary	Higher Education, Govt. of NCT of Delhi, B-Block, 5, Sham Nath Marg, Delhi-110054	Member
5	Prof. Parimal H. Vyas	Vice Chancellor, Maharaja Sayajirao University of Baroda, Vadodra, Gujarat 390002	Member
6	Prof. I.K. Bhat	Vice Chancellor, Manav Rachna University, Sector 43, Aravali Hills, Faridabad, Haryana 121004	Member
7	Prof. Rajeev Tripathi	Director, Motilal Nehru National Institute of Technology Allahabad, Teliargunj, Prayagraj, Uttar Pradesh 211004	Member
8	Prof. Madhusudan Singh	Dean, Academic (UG), Delhi Technological University	Member
9	Prof. A. Trivedi	Dean, Industrial Research and Development, Delhi Technological University	Member
10	Prof. R. S. Mishra	Professor, Mechanical Engg. Department, Delhi Technological University	Member
11	Prof. Narendra Kumar (II)	Professor, Electrical Engg. Department, Delhi Technological University	Member
12	Prof. Samsher	Registrar, Delhi Technological University	Member Secretary

1.3 Academic Council

S. No.	Name	Designation	Position in the Academic Council
1	Prof. Yogesh Singh	Delhi Technological University	Chairperson
2	Prof. Neharika Vohra	Vice Chancellor, Delhi Skill & Entrepreneurship University, Dwarka, Delhi	Member
3	Prof. J.P. Saini	Vice Chancellor, Netaji Subhash University of Technology, Dwarka, Delhi	Member
4	Prof. D.P. Goyal	Director, Indian Institute of Management, Shilong, Meghalaya	Member
5	Dr. B.R. Chahar	Professor, Indian Institute of Technology, Delhi	Member
6	Prof. Bhim Singh	Professor, Electrical Engineering, IIT Delhi, Hauz Khas, Delhi	Member
7	Sh. Rajesh Mathur	Advisor, Environmental Systems Research Institute	Member

S. No.	Name	Designation	Position in the Academic Council
8	All Deans & HODs	Delhi Technological University	Member
9	Prof. Reeta Wattal	Professor, Mechanical Engineering Department	Member
10	Prof. V.K. Minocha	Professor, Civil Engineering Department	Member
11	Prof. Pragati Kumar	Professor, Electrical Engineering Department	Member
12	Sh. Kamal Pathak	Controller of Examinations, Delhi Technological University	Member
13	Sh. Rajesh Birok	Associate Professor, Electronics & Communication Engineering Department	Member
14	Dr. M. Jayasimhadari	Assistant Professor, Applied Physics Department	Member
15	Prof. Samsher	Registrar, Delhi Technological University	Member Secretary

1.4 Planning Board

S. No.	NAME	Designation	Position in the Board
1	Prof. Yogesh Singh	Vice Chancellor, Delhi Technological University	Chairperson
2	Prof. J.P. Saini	Vice Chancellor, Netaji Subhash University of Technology, Sector 3, Dwarka, Delhi 110078	Member
3	Prof. Anu Singh Lather	Vice Chancellor, Ambedkar University Delhi, Lothian Road, Kashmere Gate, Delhi 110006	Member
4	Prof. Neharika Vohra	Vice Chancellor, Delhi Skill and Entrepreneurship University, Sector 9, Dwarka, Delhi 110077	Member
5	Prof. I.K. Bhat	Vice Chancellor, Manav Rachna University, Sector 43, Faridabad, Haryana 121004	Member
6	Prof. M. N. Doja	Director, Indian Institute of Information Technology, Sonapat, Haryana 131021	Member
7	Prof. Rajive Kumar	Member Secretary, All India Council for Technical Education	Member
8	Prof. Samsher	Registrar, Delhi Technological University	Member Secretary

1.5 Finance Committee

S. No.	NAME	Designation	Position in the Committee
1	Prof. Yogesh Singh	Vice Chancellor	Chairman
2	Sh. Sandeep Kumar	Principal Secretary/ Secretary (Finance) Govt. of NCT of Delhi	Member
3	Sh. H. Rajesh Prasad	Principal Secretary, DTTE, Govt. of NCT of Delhi	Member
4	Prof. I.K. Bhat	Vice Chancellor, Manav Rachna University, Sector 43, Faridabad, Haryana-121004	Member
5	Prof. A. Trivedi	Dean (IRD)	Member
6	Prof. Samsher	Controller of Finance/Registrar	Member Secretary

1.6 Internal Quality Assurance Cell (IQAC)

S. No.	Name	Designation
1	Prof. Yogesh Singh, Vice Chancellor	Chairperson
2	Prof. I.K. Bhat, Member BOM, DTU	Member from the Management
3	Prof. Madhusudan Singh, Registrar	Senior administrative officers
4	Sh. Kamal Pathak, Controller of Examination	Senior administrative officers
5	Sh. D.P. Diwedi, Consultant Finance & Planning	Senior administrative officers
6	Mrs. Seema Gupta, Director operation power grid corporation of India, Gurugram	One nominee from / Industrialists/Stakeholders
7	Prof. Narendra Kumar, Dean Discipline & Professor EED	Member
8	Prof. Neeta Pandey, Professor ECE & TEQIP III Coordinator	Member
9	Prof. Rinku Sharma, Professor & HoD (Applied Physics)	Member
10	Prof. Amit Mookerjee, Professor & HoD, USME	Member
11	Prof. Gurjit kaur, Professor, ECE	Member
12	Prof. Girish Kumar, Professor, MED	Member
13	Dr. Shilpa Pal, Associate Professor, CED	Member
14	Mr. Yashdeep Singh, Assistant Professor, DSM	Member
15	Sh. Arun Gupta	Nominee of Students and Alumni

S. No.	Name	Designation
16	Sh. Akhil Chaudhary	Nominee of Students and Alumni
17	Mr. Rutvik Warker	Nominee of Students and Alumni

1.7 Administration

S. No.	NAME	Designation
1	Prof. Yogesh Singh	Vice Chancellor
2	Prof. Samsher	Registrar
3	Prof. Ashutosh Trivedi	Dean, Industrial Research Development
4	Prof. Madhusudan Singh	Dean, Academics (UG)
5	Prof. Suresh C Sharma	Dean, Academics (PG)
6	Prof. Vishal Verma	Dean, International Affairs
7	Prof. R. S. Mishra	Dean, Outreach & Extension Activities
8	Prof. Pravir Kumar	Dean, Alumni Affairs (1 Aug. 2020 to 31 Dec. 2020)
9	Prof. Rajesh Rohilla	Dean, Alumni Affairs (1 Jan., 2021 to till date) and HOD Training & Placement
10	Prof. Narendra Kumar II	Dean, Student Discipline
11	Prof. S Indu	Dean, Student Welfare
12	Prof. Samsher	Dean, Continuing Education
13	Prof. S. G. Warkar	HoD, Applied Chemistry
14	Prof. S. Sivaprasad Kumar	HoD, Applied Mathematics (1 Jan., 2021 to till date)
15	Prof. Sangita Kansal	HoD, Applied Mathematics (1 Aug. 2020 to 31 Dec. 2020)
16	Prof. Rinku Sharma	HoD, Applied Physics
17	Prof. Pravir Kumar	HoD, Bio Technology
18	Dr. Rajni Jindal	HoD, Computer Science & Engineering
19	Prof. Nirendra Dev	HoD, Civil Engineering (1 Aug. 2020 to 31 Dec. 2020)
20	Prof. V. K. Minocha	HoD, Civil Engineering (1 Jan. 2021 to till date)
21	Dr. Archana Singh	HoD, Delhi School of Management
22	Dr. Ranganath. M. Singari	HoD, School of Design
23	Prof. N S Raghava	HoD, Electronics and Communication Engineering

S. No.	NAME	Designation
24	Prof. Uma Nangia	HoD, Electrical Engineering
25	Prof. S. K. Singh	HoD, Environmental Engineering
26	Prof. Nand Kumar	HoD, Humanities
27	Prof. Kapil Sharma	HoD, Information Technology/ Coordinator, IPR Cell
28	Prof. Vipin	HoD, Mechanical & Production Engineering (1 Aug. 2020 to 31 Dec. 2020)
29	Prof. Samsher	HoD, Mechanical & Production Engineering
30	Prof. Ruchika Malhotra	HoD, Software Engineering/ Associate Dean , IRD
31	Sh. Kamal Pathak	Controller of Examinations
32	Prof. M. M. Tripathi	Director IQAC (1 Aug. 2020 to 31 Dec. 2020)
33	Prof. Nirendra Dev	Director IQAC (1 Jan. 2021 to till date)
34	Prof. Samsher	Controller of Finance (1 Aug. 2020 to 31 Dec. 2020)
35	Prof. Nirendra Dev	Controller of Finance (1 Jan. 2021 to 31 July 2021)
36	Prof. Nirendra Dev	Director, HRD Cell (1 Aug. 2020 to 31 Dec. 2020)
37	Prof. S. Anbu Kumar	Director, HRD Cell (1 Jan., 2021 to till date)
38	Prof. Dinesh Chutani	Director, Recruitment
39	Prof. A K Srivastava	Director, Physical Education
40	Prof. Rachna Garg	Director, Equal Opportunity Cell
41	Prof. Vijay Gautam	Director, Center for Competitive Examination
42	Ms. Divya Narayan	Chief Operating Officer
43	Prof. A. K. Gupta	Chief Vigilance Officer
44	Dr. Ravinder Kaushik	Deputy Registrar (Exam, Legal, PGMS), PIO
45	Dr. Anil Kumar	Deputy Registrar (General Administration)
46	Dr. Pradeep Teotia	Assistant Registrar (Store & Purchase)
47	Sh. Anoop Lather	Public Relations Officer
48	Prof. Rajiv Chaudhary	Suptd. (Exam)
49	Sh. Bimal Jain	Chief Project Officer / Estate Officer
50	Sh. Madhukar Cherukuri	OSD (Results)
51	Dr. Vivek Tripathi	Assistant Registrar (International Affairs)
52	Prof. Raj Kumar Singh	OIC , Workshop

S. No.	NAME	Designation
53	Prof. Rajesh Birok	OIC, Health Centre
54	Prof. Naokant Deo	HoD, B.Tech (Evening)
55	Prof. Neeta Pandey	Coordinator, TEQIP - III
56	Dr. M Jayasimhadri	Vice Chairman (Cultural Council)
57	Prof. Rajeshwari Pandey	Associate Dean, Academic (UG)
58	Prof. Rishu Chaujar	Associate Dean, Academic (PG)
59	Prof. S G Warker	Associate Dean, Continuing Education
60	Dr. Yasha Hasija	Associate Dean, Alumni Affairs
61	Dr. Ram Singh	Associate Dean, Student Welfare
62	Dr. Roli Punwar	Associate Dean, International Affairs
63	Prof. Dinesh K. Vishwakarma	Associate Dean, Student Discipline
64	Mr. Piyush Vaish	Knowledge Network Management
65	Dr. Girish Kumar	CEO, DTU-IIF
66	Prof. Pragati Kumar	Chief Warden
67	Dr. R.K. Shukla	Librarian, OSD (East Campus Delhi)
68	Prof. S.K. Khanna	Incharge, Council Branch & Planning
69	Dr. Jitender	Deputy Registrar, Establishment, Pension
70	Dr. Nitin Puri	Security officer & Transport Officer/ Associate Dean, Outreach & Extension Activities

2 Academic and Non-Academic Staff

2.1 Academic Staff

S. No.	Department	Prof.	Assoc. Prof.	Asstt. Prof.	Programmer/ Scientist/ Inspire/Designer Faculty	Total
1	Applied Chemistry	5	3	6	1	15
2	Applied Mathematics	10	-	8	-	18
3	Applied Physics	6	-	15	-	21
4	Biotechnology	4	-	7	-	11
5	Civil Engineering	15	6	4	-	25
6	Computer Science and Engineering	4	3	15	1	23
7	Delhi School of Management	3	3	10	-	16
8	Electronics and Communication Engineering	13	3	31	-	47
9	Electrical Engineering	21	4	25	2	52
10	Environmental Engineering	2	-	4	-	6
11	Humanities	2	2	1	-	5
12	Information Technology	3	1	7	-	11
13	Mechanical Engineering	20	10	11	-	41
14	University School of Management & Entrepreneurship (USME)	2	-	18	-	20
15	Department of Design	2	-	5	2	9
16	Department of Software Engineering	1	-	9	-	10
Total		113	35	176	6	330

2.2 Non-academic Staff

S. No.	Post	Total Filled Post	Present Posting	Remarks
1	Assistant Account Officer	2	Account Branch	Deputation
2	AE(CIVIL)	1	Engineering Cell	Deputation
3	Senior Account Officer / DDO	2	Account Branch	Deputation

S. No.	Post	Total Filled Post	Present Posting	Remarks
4	Assistant Programmer	2	Computer Center – 1	Regular
			CSE -1	Regular
5	Assistant Registrar	4	Dean (IA) -1	Regular
			East Campus – 1	Deputation
			On Deputation (AU) -1	Regular
			Store and Purchase -1	Deputation
6	Chief Operating Officer	1	Computer Center	Regular
7	Chief Store Keeper	1	Store & Purchase	Regular
8	Chowkidar	1	Account Branch	Regular
9	Controller of Examination	1	Examination branch	Regular
10	Counter Assistant	3	Central Library	Regular
11	Daftri	1	Account Branch	Regular
12	Deputy Registrar	3	Establishment Branch-1	Deputation
			Examination Branch - 1	Regular
			General Administration -1	Regular
13	Director Physical Education	1	Director Physical Education	Regular
14	Draughtsman	1	Mechanical Engineering	Regular
15	Driver	1	VC Office	Regular
16	EDP Manager	1	Result Section	Regular
17	Electrician	1	Engineering Cell	Regular
18	Executive Engineer	1	Engineering Cell	Deputation
19	Farash	1	Engineering Cell	Regular
20	Foreman	8	CSE-1	Regular
			ECE-1	Regular
			Electrical Engineering-2	Regular
			Mechanical Engineering-4	Regular
21	Foreman Instructor	2	Mechanical Engineering	Regular
22	Guest Operator	1	Engineering Cell	Regular
23	Jr. Mech	8	Electrical Engineering -1	Regular
			Mechanical Engineering-7	Regular
24	Junior Engineer (Electrical)	1	Engineering Cell	Regular
25	Junior Engineer (Civil)	1	Engineering Cell	Regular

S. No.	Post	Total Filled Post	Present Posting	Remarks
26	Junior Office Assistant	3	Account Branch	Regular
			East Campus-1	Regular
			IRD-1	Regular
27	Knowledge Network Manager	1	Computer Centre	Regular
28	Lab Attendant	2	Academic UG-1	Regular
			Central Library-1	Regular
29	Librarian	1	Central Library	Regular
30	Library Attendant	1	Central Library	Regular
31	Mali	1	Engineering Cell	Regular
32	Multi-Tasking Staff	3	DTTE ON DIVERT CAPACITY-1	Regular
			ECE-1	Regular
			Engineering Cell -1	Regular
33	Office Assistant	1	Establishment Branch	Regular
34	Peon	1	Central Library	Regular
35	Programmer	1	CSE	Regular
36	Safai Karamchaari	6	Applied Chemistry – 1	Regular
			Computer Center -1	Regular
			CSE -1	Regular
			ECE-1	Regular
			Engineering Cell -1	Regular
			Mechanical Engineering -1	Regular
37	Section Officer	7	Academic PG-1	Regular
			Account Branch -1	Deputation
			East Campus -1	Deputation
			Establishment Branch -2	Regular
			On Deputation (AIIMS Rishikesh) - 1	Regular
			Store & Purchase - 1	Deputation
38	SOA	6	Academic PG -1	Deputation
			Establishment Branch -1	Deputation
			General Administration -1	Deputation
			Recruitment -2	Regular
			Training and Placement -1	Regular

S. No.	Post	Total Filled Post	Present Posting	Remarks
39	Sr. Account Officer	1	Account Branch	Deputation
40	Sr. Mech.	18	Applied Physics	Regular
			ECE	Regular
			Electrical Engineering	Regular
			Environmental Engineering	Regular
41	Stenographer Grade-II	1	Legal	Regular
42	Stenographer Grade-III	4	Consultant (F&A)	Regular
			Examination Branch	Regular
			Hostel Office	Regular
43	Technical Assistant	3	Applied Chemistry-1	Regular
			Biotechnology -1	Regular
			ECE-1	Regular
	Total	110		

* Dy. Physical Education, Librarian, Foreman Instructor and Programmer are Academic Post.

3 Academic Programmes

3.1 Undergraduate Courses

S. No.	Department	B. Tech. Programme	Duration	Sanctioned Intake	Total No. Admitted
1	Applied Chemistry	Chemical Engineering	4 years	77	76
2	Applied Mathematics	Mathematics and Computing	4 years	152	151
3	Applied Physics	Engineering Physics	4 years	117	116
4	Biotechnology	Biotechnology	4 years	77	76
5	Civil Engineering	Civil Engineering	4 years	152	151
		Civil Engineering (Cont. Edu.)	4 years	60	22
6	Computer Science & Engineering	Computer Engineering	4 years	452	452
		Software Engineering	4 years	152	151
7	Electrical Engineering	Electrical Engineering	4 years	302	301
		Electrical Engineering (Cont. Edu.)	4 years	60	58
8	Electronics & Communication Engineering	Electronics & Communication Engineering	4 years	232	232
		Electronics & Communication Engineering (Cont. Edu.)	4 years	60	11
9	Environmental Engineering	Environmental Engineering	4 years	77	76
10	Information Technology	Information Technology	4 years	152	151
11	Mechanical Engineering	Mechanical Engineering	4 years	302	302
		Production & Industrial Engineering	4 years	77	76
		Mechanical Engineering with specialization in Automotive Engineering	4 years	77	76
		Mechanical Engineering (Cont. Edu.)	4 years	60	23
Total				2638	2501
Kashmiri Migrant			01	-	
B.Tech. Lateral Entry			3 years	17	17
Total NRI Candidates				317	143
Total PMSSS Candidates				10	09
Grand Total				2983	2670

S. No.	Department	Programme	Duration	Sanctioned Intake	Total No. Admitted
1	University School of Management & Entrepreneurship (USME)	BBA	3 Years	180+18 (FN)	182
		BA-Economics (Hons.)	3 Years	180+18 (FN)	152
2	Department of Design	B. Des.	4 Years	98+9 (FN)	83
Total				503	417

3.2 Post Graduate Courses

Post Graduate Courses (Master of Technology)

S. No.	Department	M. Tech. Programme	Duration	Sanctioned Intake	Total No. Admitted
1	Applied Chemistry	Polymer Technology	2 years	24+5	0
2	Applied Physics	Nano Science & Technology	2 years	24+5	02
3	Biotechnology	Bioinformatics	2 years	25+5	02
		Industrial Biotechnology	2 years	25+5	14
4	Civil Engineering	Geotechnical Engineering	2 years	25+5	23
		Hydraulics & Water Resources Engineering	2 years	24+5	10
		Structural Engineering	2 years	25+5	28+01(SPN)
		Geoinformatics	2 years	25+5	11
5	Computer Science & Engineering	Computer Science & Engineering	2 years	25+5	26+1(SPN)
		Software Engineering	2 years	25+5	26+01(SPN)
6	Information Technology	Information System	2 years	25+5	25
7	Electronics & Communication Engineering	Microwave & Optical Communication Engineering	2 years	24+5	09
		Signal Processing & Digital Design	2 years	24+5	14+01(SPN)
		VLSI Design and Embedded System	2 years	25+5	26
8	Electrical Engineering	Control & Instrumentation	2 years	24+5	11
		Power System	2 years	25+5	22
		Power Electronics and Systems	2 years	24+5	23
9	Environment Engineering	Environmental Engineering	2 years	24+5	13
10	Mechanical Engineering	Production Engineering	2 years	24+5	10
		Thermal Engineering		25+5	23+01(SPN)
Total				489+100	322

Management Programmes 2020-21

S. No.	Department	Programme	Duration	Sanctioned Intake	Total No. Admitted
1	USME	MBA Innovation, Entrepreneurship and Venture Development	2 years	40	15
		MBA Business Analytics	2 years	38	29
		Master of Business Administration	2 years	120	95
		MBA Family Business & Entrepreneurship	2 years	40	8

S. No.	Department	Programme	Duration	Sanctioned Intake	Total No. Admitted
2	DSM	Master of Business Administration (Executive)	2 years	75	37
		Master of Business Administration (MBA)	2 years	150	166
Total				463	350

M.Sc. Programme 2020-21

S. No.	Department	Programme	Duration	Sanctioned Intake	Total No. Admitted
1	M.Sc.	M.Sc. Mathematics	2 years	40	40
		M.Sc. Physics	2 years	40	40
		M.Sc. Biotechnology	2 years	40	40
Total				120	120

3.3 Ph.D. Programmes

S. No.	No. of Students Department Wise Data (August 2020 to July 2021)		
1	Applied Chemistry	Chemical Engineering	3
		Chemistry	8
2	Applied Mathematics- Mathematics (AM)	Applied Mathematics- Mathematics	5
3	Applied Physics	Physics	14
		Engineering Physics (EP)	3
4	Biotechnology (BT)	Biotechnology (BT)	2
5	Civil Engineering (CE)	Civil Engineering (CCE)	22
6	Computer Science and Engineering (CSE)	Computer Science and Engineering (COE)	27
7	Electrical Engineering (EE)	Electrical Engineering (CEE)	30
8	Electronics and Communication Engineering (ECE)	Electronics and Communication Engineering (CECE)	29
9	Mechanical Engineering (ME)	Mechanical Engineering (CME)	23
10	Environmental Engineering (ENE)	Environmental Engineering (ENE)	14
11	Humanities (HUM)	Humanities (HUM)	3
12	Information Technology (IT)	Information Technology (IT)	6
13	Delhi School of Management (DSM)	Delhi School of Management (DSM)	15
14	University School of Management and Entrepreneurship (USME)	University School of Management and Entrepreneurship USME	11
15	USME (IEV)	USME (IEV)	4
16	USME-Economics	USME-Economics	8
17	Department of Design	Department of Design	4
Grand Total			231

4 Academic Departments

4.1 Department of Applied Chemistry



Prof. S.G. Warker, HoD

ACADEMIC PROGRAMMES

- B. Tech. (Chemical Engineering)
Intake: 77
Students Admitted: 76
- M. Tech. (Polymer Technology)
Intake: 24+5
Students Admitted: 0
- Ph.D. Research Scholars Admission
Ph.D. (Chemical Engineering): 3
Ph.D. (Chemistry): 8

LABORATORIES

The department has well-established laboratories such as Applied Chemistry Lab, Polymer Chemistry Lab, Polymer Testing & Characterization Lab, Polymer Processing Lab, Chemical Technology Lab, Chemical Reaction Engineering Lab, Instrumentation Lab, Heat and Mass Transfer Lab, Fibre Technology Lab, Computer Aided Design, Innovation Lab, and four Research Labs. All UG/PG students and Research Scholars carry out their projects in these laboratories jointly with experts from industry and teachers of the department.

ACHIEVEMENTS

- | | |
|------------------------|----|
| • Journal Publications | 27 |
| • Book Chapters | 2 |

SALIENT FEATURES

The department aims to provide state-of-art knowledge and practical skills to the UG and PG students in the diverse subjects of Applied Chemistry, Chemical Engineering, and Polymer Technology. Facilitating R&D activities at UG level is the prime concern. Innovations in chemistry, chemical and polymers are focused to provide green technologies, product to global industries and design of novel separation processes. New molecules for improving human health and medical care, hydrogels for improved agri-products, innovative polyfibrils for clean water, conducting polymers, nano- embedded and green polymers for food- packaging are some of the main areas in which our PG and doctoral students are excelling beyond imagination.



ACADEMIC STAFF

Professors: 05

- **Prof. (Dr.) S. G. Warkar (HoD)**, Ph.D., Area of Interest is Inorganic Chemistry and Polymers.
- **Prof. (Dr.) D. Kumar**, Ph.D., Area of Interest is Conducting Polymer.
- **Prof. (Dr.) Archana Rani**, Ph.D., Area of Interest is Organic Chemistry.
- **Prof. (Dr.) R. C. Sharma**, Ph.D., Areas of Interest are Electro Solution Chemistry and Molten Electrolytes.
- **Prof. (Dr.) Rajinder K. Gupta**, Ph.D., Areas of Interest are Organic Chemistry & Bio-polymer, Nutraceuticals & functional foods.

DST Inspire Faculty: 01

- **Dr. Chandra Mouli Pandey**, Ph.D., Areas of Interests are Biosensors, Nano-materials, Point of Care Diagnostics.

Associate Professors: 03

- **Dr. Anil Kumar**, Ph.D., Areas of Interest are Bio Inorganic Chemistry, Solar Cell, Cell Imaging, Electronic Structure cal. using G03 suite program.

- **Dr. Ram Singh**, Ph.D., Areas of Interest are Organic and Medicinal Chemistry, Neuro-chemistry and Natural Products.
- **Dr. Roli Purwar**, Ph.D., Areas of Interest are Biopolymers, Polymeric membranes, Textiles processing, Natural Materials and their application, Medical Textiles and Effluent treatment.

Assistant Professors: 06

- **Dr. Richa Srivastava**, Ph.D., Areas of Interest are Organic Synthesis, Supramolecular Chemistry and Biomimetic Reactions.
- **Dr. Saurabh Mehta**, Ph.D., Areas of Interest are Organic Synthesis (conventional and combinatorial), bioorganic and Medicinal Chemistry, etc.
- **Dr. D. Santhiya**, Ph.D., Areas of Interest are Nano-Biotechnology, Biosynthesis of nanopatterned materials, Environmental Biotechnology and Surface Chemistry.
- **Dr. Raminder Kaur**, Ph.D., Areas of Interest are Reaction Engineering, Polymer Composites and Bio-based Polymers.
- **Dr. Poonam**, Ph.D., Area of Interest is Material Chemistry.
- **Dr. Manish Jain**, Ph.D., Areas of Interest are Chemical Engineering, Membrane based separations and Polymer Science.

Achievements of the Department

The department of Applied Chemistry is one of the oldest department of the University. We provide state-of-art knowledge and practical skills to the UG and PG students in the diverse subjects of Applied Chemistry, Chemical engineering and Polymer Technology. The innovations are focused to provide green technologies and products to global industries. The department has fifteen well-managed laboratories to carry out project work and research. In last one year, the department has published more than 30 research papers, attended national and international conferences/ seminars. The department has also contributed towards conference proceeding and book chapters of national and international repute. The students of the department have been placed in well-established industries and also some of them taken admission in foreign universities.

Teachers provided with financial support

All the faculty members received financial support of ₹ 25000/- each to enrich the ICT for online teaching.

Participation in Professional Development Programmes by our Faculties

- Prof. A Rani attended an on-line webinar "Bioconjugation in Polymer Chemistry" organized by American Chemical Society (ACS) on 7th August, 2020.
- Prof. A Rani participated in an online panel Discussion on "Making Mentoring Relevant: NEP 2020 Perspective" on 21nd September, 2020 organized by National Institute of Technical Teacher Training and Research (NITTTR).
- Prof. A Rani attended C&EN's (ACS Publication) webinar, "Antibody-drug conjugates drug development &

manufacturing trends, challenges and solutions," sponsored by WuXi Biologics and STA Pharmaceutical (WuXi STA), 15th December, 2020.

- Prof. A Rani completed two-week national level on-line Faculty Development Programme on "On-line Teaching and Learning Practices" held on 15th - 31st October, 2020, organized by virtual Labs (An MHRD Govt of India Initiative), IIT Delhi, and Virtuality India.
- Prof. A Rani attended workshop on "Continuous evaluation Scheme AY 2021-22" organized by DTU on 30th July, 2021.
- Dr. Anil Kumar attended "Trends in Chemical Sciences: Challenges and Opportunities in the coming decade", from 21st - 26th September, 2020, through online organised by Department of Chemistry, CUJ, Jharkhand.
- Dr. Anil Kumar attended one week FDP on "Ethics and Values in Technical Education in Context of National Education Policy 2020", from 15th - 19th April, 2021 online, organised by Centre for Value Based Education, Delhi Technological University Delhi.
- Dr. Anil Kumar attended "Nascent Methodologies, Challenges and Realms of Research" 03rd - 07th October, 2020, organised by E & C Department, DTU.
- Dr. Ram Singh Coordinated, One Day virtual Workshop on "Accelerators/ Incubation – Opportunities for Students & Faculties - Early-Stage Entrepreneurs" on 19th June, 2021, organized by Department of Applied Chemistry, DTU.
- Dr. Ram Singh attended TEQIP-assisted one-week FDP on "Advance Rechargeable Batteries: From powder to power" from 25th - 30th December, 2020 organised by Dept of Physics and Chemical Engineering, IIT Roorkee.

- Dr. Ram Singh attended One-week FDP on Nascent Methodologies, Challenges and Realms of Research, held from 3rd - 7th October, 2020, organized by Dept of Electronics and Communication Engineering, DTU, India.
- Dr. Roli Purwar attended short term program on “Textile Testing and analytical Techniques in Textile and Fashion” from 27th November - 1st December, 2020, organized by NIT Jalandhar.
- Dr. Roli Purwar attended short term program on “Characterization Techniques in Textiles and Polymers” from 15th - 19th December, 2020, organized by NIT Jalandhar.
- Dr. Raminder Kaur attended AICTE sponsored one-week Short Term Training Programme-III (online) on “Environmental Protection and Management” from 14th to 19th June, 2021 organised by Sardar Beant Singh State University, Gurdaspur, Punjab.
- Dr. Raminder Kaur attended AICTE Training And Learning (ATAL) Academy Online FDP on "Green Technology & Sustainability Engineering" from 26th - 30th October, 2020 organised by Sardar Vallabhbhai National Institute of Technology, Surat, Gujrat, India.
- Dr. Raminder Kaur attended International Virtual Faculty Development Program on “Sustainable Development and Research Opportunities in Food and Chemical Engineering” from 5th - 11th October, 2020 organised by Department of Food Technology & Department of Chemical Engineering, Hindustan College of Engineering and Technology, Coimbatore, Tamil Nadu, India.
- Dr. Raminder Kaur attended Online Faculty Development Program on “Universal Human Values for Deeksharambh” (Student Induction Program) from 21st - 25th September, 2020 organised by Department of Mechanical Engineering National Institute of Technology Patna, India.
- Dr. Saurabh Mehta attended AICTE Training and Learning (ATAL) Academy Online Elementary FDP on "Adoption of Virtual Reality Technologies for Drug Discovery: The Centerpiece of Academic and Industry Labs" from 26th - 30th July, 2021 at KIET Group of Institutions (KIET School of Pharmacy).
- Dr. D. Santhiya attended Online FDP on "Sustainability Engineering" from 4th - 8th January, 2021, organised by CMR Institute of Technology, AICTE Training and Learning (ATAL) Academy.
- Dr. D. Santhiya attended Online International FDP “Sustainable Development and Research Opportunities in Food and Chemical Engineering” from 5th - 11th October, 2020 organized by Department of Food Technology and Chemical Engineering, Hindusthan College of Engineering and Technology, Coimbatore, Tamil Nadu, India.
- Dr. D. Santhiya attended International Faculty Development Programme (FDP) on “The Art of Doing Research” from 12nd - 22th July, 2021 jointly organized by Jyothi Engineering College, Thrissur, India, CHRIST (Deemed to be University), Bangalore, India and Pelita Bangsa University, Indonesia in association with Internal Quality Assurance Cell (IQAC), Jyothi Engineering College, Thrissur, India.
- Dr. D. Santhiya attended Online FDP on Universal Human Values Deeksharambh (Student Induction Program) from 21st - 25th September, 2020 organised by Department of Mechanical Engineering National Institute Of Technology Patna NIT Patna.

- Dr. Richa Srivastava attended Two-week Faculty Development Programme on Online Teaching Pedagogies from 27th July - 2nd August, 2020, organised by Gautam Buddha University, Greater Noida, UP.

Faculty visit to other institutions for taking Experts' Lectures and other academic works

- Prof. SG Warkar delivered Online Guest Lecture for Global Classroom Session in University of Malaysia Pahang, Malaysia on "Recent Advances in Polymers" dated 19th August, 2020.
- Prof. A Rani visited IARI as a member of selection and assessment committee.
- Prof. A Rani visited National Fertilizer Limited (NFL) as a subject expert in the selection committee.
- Prof. A Rani evaluated PhD thesis and conducted of viva- voce (online mode) at JECRC University, Jaipur.
- Dr. Anil Kumar delivered lecture on "Recent Advances in Porphyrinoid Chemistry" at National Webinar on 21st July, 2020 organised by Department of Chemistry, Bapuji Institute of Engineering and Technology, Davanagere, Karnataka.
- Dr. Anil Kumar delivered lecture on "Exploring Carbaporphyrinods: meta-Benziporphodimethenes" on 14th August, 2020 at Department of Chemistry, IIT Roorkee.
- Dr. Ram Singh delivered lecture on "Alzheimer's Disease: Facts, Challenges and Opportunities" on 17th October, 2020, at Shivaji College, University of Delhi.
- Dr. Ram Singh delivered lecture on Pathogenesis and treatment of Alzheimer's Disease on 28th October, 2020 at webinar at Daulat Ram College, University of Delhi.
- Dr. Ram Singh delivered lecture on "Research and Innovation in Higher Education" at Dhote Bandhu Science College, Gondia affiliated to RTM Nagpur University on 12th February, 2021 in FDP programme.
- Dr. Ram Singh delivered lecture on Chemistry for Sustainable development, Amity University, 31st March, 2021.
- Dr. Saurabh Mehta delivered oral presentation entitled "Synthesis and Studies of Biologically Important Heterocyclic Compounds" at the online Webinar series "Meet IIT Roorkee Chemistry Alumni" at Department of Chemistry at IIT Roorkee on 13th August, 2020.
- Dr. D. Santhiya delivered lecture at First International Online Conference on Blends, Composites, Bio-Composites and Nanocomposites (ICNC-2020), Mahatma Gandhi University, P.D. Hills P.O, Kottayam, Kerala, India.
- Dr. D. Santhiya delivered lecture at 26th International Conference (Online) of International Academy of Physical Sciences (Coniaps XXVI), Mahatma Gandhi University, P.D. Hills P.O, Kottayam, Kerala, India).
- Dr. D. Santhiya delivered lecture on Template Assisted Calcium Based Drug Carriers for Efficient Oral Delivery Applications at International Conference on Innovations in Biotechnology and Life Sciences (ICIBLS) 2020, Department of Biotechnology, DTU.
- Dr. Richa Srivastava presented paper at International Meet for Quality and

Quantity from August 21st - 22nd, 2020, Division of Chemistry, SAS, VIT Chennai.

- Dr. Richa Srivastava presented paper at Virtual International Conference on Surface Chemistry, 27th - 28th August, 2020, Department of Chemistry, Annamalai University, Tamil Nadu.

Teachers awarded International Fellowship for advanced studies/research:

Dr. Anil Kumar received visiting Associate Professor from Schulich Faculty of Chemistry Technion IIT HAIFA.

Teachers receiving seed money for research in current year

- Dr. Raminder Kaur received ₹78000/- under the 2nd year of DTU research project entitled, "Synthesis and study of nano-structured polyaniline for eradication of hazardous waste: A neoteric adsorbent for wastewater treatment."
- Dr. Saurabh Mehta, received seed money of 1.14 Lakhs from DTU.
- Dr. Manish Jain, received seed money of 0.46 Lakh from DTU.

Detail of awards for innovation won by department/teachers/research scholars/students during the current year

Dr. Roli Purwar received Project grant of ₹26 Lakh which has been approved by SERB-DST under EMR scheme for project titled "Design and development of Antibacterial nanofibrous membrane from regenerated Nonmulberry silk fibroin's and its blends for medical textiles" Second year Grant of ₹ 6.8 lakh has been received and executed.

Functional MoUs with Institutions of National, International Importance, Other Universities, etc.

MoU was signed between DTU and Amicures Research Pvt Ltd in 2019 for a period of 5 years to promote and enhance research interest between DTU and Amicures in the area of pharmaceuticals and health care.

Detail of student progression to higher education (previous graduating batch) (the current year)

- Srishti Mittal, B.Tech (Polymer Science & Chemical Technology), MS in Chemical Engineering, at UCLA, Los Angeles, California.
- Drishti Singh, B.Tech (Polymer Science & Chemical Technology) ton in Chemical Engineering, BITS Pilani, Rajasthan.

Detail of capability enhancement and development schemes organised by department

Dr. Ram Singh Coordinated, One Day virtual Workshop on Accelerators/Incubation – Opportunities for Students & Faculties - Early-Stage Entrepreneurs on 19th June, 2021, organized by Department of Applied Chemistry, DTU.



4.2 Department of Applied Mathematics

Prof. S. Sivaprasad Kumar, HoD



ACADEMIC PROGRAMMES

- B. Tech. (Mathematics and Computing)
Intake: 152
Students Admitted: 151
- M. Sc. (Mathematics)
Intake: 40
Students Admitted: 40
- Ph.D. Research Scholars: 5

LABORATORIES

The Department of Applied Mathematics offers state-of-the-art computing facilities to all the undergraduate and graduate students, research scholars and faculty members. A high-speed Local Area Network connection through the Institute's central facilities, ensure that all students and faculty have the most modern computing facilities, including round-the clock internet and e-mail connection, to meet their academic and research needs. Department has three computational labs. Computational lab I, II and III fully functional and have 90 computer systems with latest configuration.

ACHIEVEMENTS

- | | |
|---------------------------|----|
| • Journal Publications | 28 |
| • Conference Publications | 5 |

SALIENT FEATURES

The Department of Applied Mathematics is the pride of DTU. The aim of the department is to impart the sound knowledge of Mathematics, Statistics and Computing to the students through teaching and research. The department is achieving its goals/objectives with the help of highly qualified faculty. The research output of the department is very impressive and speaks clearly for the quality of work. Faculty members are also actively involved in research, projects and various academic activities.



ACADEMIC STAFF

Professors: 10

- **Prof. Sangita Kansal**, M.Sc., Ph.D., Area of Interest are Graph Theory and Petri net Theory.
- **Prof. H.C. Taneja**, M.Sc., M.Phil., Ph.D., Area of Interest is Information Theory.
- **Prof. S. Sivaprasad Kumar**, M.Sc., M.Phil., Ph.D., Area of Interest is Complex Analysis.
- **Prof. R. Srivastava**, M.Sc., Ph.D., Area of Interest is Numerical Simulation.
- **Prof. Naokant Deo**, M.Sc., Ph.D., Area of Interest is Approximation Theory.
- **Prof. Anjana Gupta**, M.Sc., M.Phil., Ph.D., Area of Interest is Optimization Techniques.
- **Prof. L.N. Das**, M.Sc., Ph.D., Area of Interest is Operations Research.
- **Prof. V.P. Kaushik**, Ph.D., Area of Interest is Operations Research.

- **Prof. Chandra Prakash Singh**, M.Sc., Ph.D., Areas of interest are General Relativity and Cosmology.
- **Prof. Aditya Kaushik**, Ph.D., Areas of interest are Differential Equations and Numerical Analysis.

Assistant Professors: 08

- **Dr. Nilam**, Ph.D., Area of Interest is Mathematical Modeling.
- **Dr. Vivek Kumar Aggarwal**, M.Sc., Ph.D., Area of Interest is Numerical Analysis.
- **Mr. Rohit Kumar**, M.Sc., Areas of Interest are Quantum Computing and Graph Theory.
- **Ms. Goonjan Jain**, B.E., MTech., Areas of Interest are Natural language processing, Information retrieval.

- **Dr. Dinesh Udar**, M.Sc., Ph.D., Area of Interest is Algebra.
- **Dr. Satyabrat Adhikari**, Ph.D., Area of Interest is Quantum Information Processing.
- **Mr. Dharendra Kumar**, M.Sc., M.Tech., Areas of Interest are Medical image processing, Image classification and Signal processing.
- **Ms. Payal**, M.Sc., Area of Interest is Petri Net Theory.



Achievements of the Department

- The Department of Applied Mathematics has conducted one-day Research Orientation Program.
- The program B.Tech. (Mathematics and Computing) run by Department of Applied Mathematics is approved by AICTE.

Participation in Professional Development Programmes by our Faculties

- Prof. Aditya Kaushik attended the program titled "Exploring Science and Technology Interconnections" organized by Panjab University, Chandigarh.
- Prof. Aditya Kaushik attended the program titled "Outcome Based Engineering Education and Accreditation" organized by National Institute of Technology, Meghalaya.
- Prof. Aditya Kaushik attended the program titled "Nascent Methodologies-Challenges and Realms of Research" organized by Delhi Technological University, Delhi.
- Prof. Aditya Kaushik attended the program titled "Mathematics with MATLAB and MATHEMATICA" organized by IIT, Indore.
- Prof. Aditya Kaushik attended the program titled "Mathematical Approaches in Mechanics" organized by IIT, Indore.
- Prof. Aditya Kaushik attended the program titled "Academic Writing using LaTeX" organized by Sardar Vallabhbhai National Institute of Technology, Surat.
- Dr. Dharendra Kumar attended the program titled Deep Learning and Artificial Intelligence organized by ATAL AICTE, IGNDTU, Delhi.
- Dr. Dharendra Kumar attended the program titled Artificial Intelligence Driven Biomedical Data Analysis for Disease Diagnosis organized by TEQIP III IIT Indore.
- Dr. Dharendra Kumar attended the program titled Machine Learning and Computer Vision: Applications, Research Challenges organized by TEQIP III NIT, Silchar, Assam GUIST, Guwahati, Assam.
- Dr. Dharendra Kumar attended the program titled online Universal Human Values Refresher 1 FDP organized by AICTE, Nelson Mandela Marg, Vasant Kunj, New Delhi.
- Dr. Dharendra Kumar attended the program titled Multi Technology organized by National Youth Council of India and Brainovision Solutions India Pvt. Ltd Department of Computer Engineering, Bharati Vidyapeeth College Of Engineering.
- Dr. Dharendra Kumar attended the program titled E-Workshop on research methodology and publication ethics organized by Dr. B.R. Ambedkar Library, JNU, New Delhi.
- Dr. Goonjan Jain attended the program titled STTP on "Teaching Learning Pedagogies" organized by A.G. Patil Polytechnic Institute, Solapur.
- Dr. Goonjan Jain attended the program titled FDP on "Advance Pedagogical Techniques" organized by TLC, Ramanujan College, DU.
- Dr. Goonjan Jain attended the program titled Refresher Course on "Applied Mathematics and Statistics" organized by Devi Ahilya Vishwavidyalaya, Indore.
- Dr. Goonjan Jain attended the program titled Industrial Training on "Artificial Intelligence and Machine Learning -

- A Project based Learning Approach” organized by NITTTR Chandigarh.
- Dr. Goonjan Jain attended the program titled Online National Webinar on Latex, Maple and SPSS organized by Government college Patharia, Dist. Damoh (MP).
 - Dr. Goonjan Jain attended the program titled Online two - week interdisciplinary Refresher Course/Faculty Development Programme on Advanced Research Methodology 2.0 organized by TLC, Ramanujan College, DU.
 - Ms. PAYAL attended the one week Faculty Development Program on “Advanced Pedagogical Techniques” under the MHRD Pandit Madan Mohan Malviya National Mission on Teachers and Teaching organized by Teaching Learning Centre, Ramanujan College, University of Delhi.
 - Ms. PAYAL attended the four weeks Induction/Orientation Programme for “Faculty in Universities/Colleges/ Institutes of Higher Education” under the aegis of MHRD Pandit Madan Mohan Malviya National Mission on Teachers and Teaching organized by Teaching Learning Centre, Ramanujan College, University of Delhi.
 - Ms. PAYAL attended the two weeks Refresher Course in “Mathematics” organized by Department Mathematics, Ramanujan College.
 - Mr. Rohit Kumar attended Orientation towards Technical Education and Curriculum Aspects by NITTT organized by NITTT.
 - Mr. Rohit Kumar attended the program titled Professional Ethics and Sustainability organized by NITTT.
 - Mr. Rohit Kumar attended the program titled Communication Skills, Modes and Knowledge Dissemination organized by NITTT.
 - Mr. Rohit Kumar attended the program titled Instruction Planning and Delivery organized by NITTT.
 - Mr. Rohit Kumar attended the program titled Technology Enabled Learning and Life-Long Self Learning organized by NITTT.
 - Mr. Rohit Kumar attended the program titled Student Assessment and Evaluation organized by NITTT.
 - Mr. Rohit Kumar attended the program titled Creative Problem Solving, Innovation and Meaningful R&D organized by NITTT.
 - Mr. Rohit Kumar attended the program titled Institutional Management and Administrative Procedures organized by NITTT.
 - Mr. Rohit Kumar attended the program titled refresher course in “Mathematics” organized by Department of Mathematics, organized by Ramanujan College, University of Delhi, Delhi.
 - Dr. Satyabrata Adhikari attended the Refresher course in "Mathematics" organized by Department of Mathematics, Ramanujan College.
 - Ms. Sumedha Seniaray attended the program titled Development & Implementation of MOOCs organized by Ramanujan College.
 - Ms. Sumedha Seniaray attended the program titled Advanced Pedagogical Techniques organized by Ramanujan College.

- Ms. Sumedha Seniaray attended the One Month Online Orientation Programme organized by Ramanujan College.
- Ms. Sumedha Seniaray attended the Two-weeks Refresher Course in Mathematics organized by Ramanujan College.
- Dr. Vivek Kumar Aggarwal attended the program titled Introduction to Financial Mathematics: exploring the machine learning approach for option pricing problems in the stock market organized by IIIT Raipur.
- Dr. Vivek Kumar Aggarwal attended the program titled Foundation of data science and its application organized by IGDTW University, Delhi.
- Dr. Dharendra Kumar delivered a lecture on Introduction to Technical Writing in Latex” at one-day Research Orientation Program 2021 organized by Department of Applied Mathematics, DTU, Delhi.
- Prof. Naokant Deo delivered a lecture on Convergence Estimates - an overview at Refresher Course on "Non-linear Analysis for the Development of Neural Network System" at Department of Mathematics, G. G. University, Bilaspur, Chhattisgarh.
- Prof. Naokant Deo delivered a lecture on Direct Estimates in Approximation at Refresher Course in Applied Mathematics, Ranchi University, Ranchi, Jharkhand.
- Prof. Sangita Kansal delivered a lecture on Signed Petri Net at JNU, Delhi.
- Prof. Sangita Kansal chaired a session, in ICRTMA-GPN-2020, at JNU, Delhi.
- Prof. Sangita Kansal worked as a member of the expert committee for INSPIRE fellowship at DST, Delhi.
- Prof. Sangita Kansal worked as a member of Academic Council at Manav Rachna University, Faridabad.
- Prof. Sangita worked as subject expert in RDC at HBTU, Kanpur.
- Dr. Satyabrata Adhikari delivered lecture in National Webinar on "Recent Advances in Mathematical Sciences" organized by Atma Ram Sanatan Dharma College.
- Dr. Satyabrata Adhikari delivered lecture in the "National Quantum Science and Technological Symposium" on "Quantum Communication" organized by IIIT Hyderabad and IEEE Quantum Initiative, in association with Quantum Science and Technology Council of India.

Faculty visit to other institutions for taking Experts' Lectures and other academic works

- Dr. Goonjan Jain worked as a Member of Program Committee of International Semantic Intelligence Conference (ISIC 2021), held from 25th - 27th February, 2021.
- Dr. Goonjan Jain worked as a Reviewer of ISIC 2021 special session Multilingual and Interlingual Semantic Representations for Natural Language Processing (MISRNL 2021).
- Dr. Dharendra Kumar delivered a lecture on Medical Image Segmentation using Fuzzy Set Theoretic Approach at FDP titled “Recent trends in machine learning and IoT 2021” organized by MNNIT Allahabad, Prayagraj, UP.
- Dr. Dharendra Kumar delivered a lecture on “Image Processing with Python” at one day webinar organized by DST CIMS BHU ACM Student Chapter, BHU, Varanasi.

- Vivek Kumar Aggarwal delivered a lecture on Introduction to Matlab and its applications at DTU.

Students qualifying in state/national/international level examinations during the current year

- 8 students qualified in state/ national/ international level examinations (NET/ SLET/GATE/GMAT/CAT/GRE/TOEFL/ Civil Services examination).

Detail of student progression to higher education (previous graduating batch) (the current year)

- Suvi Varshney joined University of California, Davis for masters.
- Kasvi Srivastava joined UBC for masters.

Detail of capability enhancement and development schemes organized by department

- Department has organized research orientation programme.



4.3 Department of Applied Physics

Prof. Rinku Sharma, HoD



ACADEMIC PROGRAMMES

- B. Tech. (Engineering Physics)
Intake: 117
Students Admitted: 116
- M. Tech. (Nano Science and Technology)
Intake: 24+5
Students Admitted: 2
- M. Sc. Physics
Intake: 40
Students Admitted: 40
- Ph.D. Research Scholars Admission
Ph.D. (Physics): 14
Ph.D. (Engineering Physics): 3

LABORATORIES

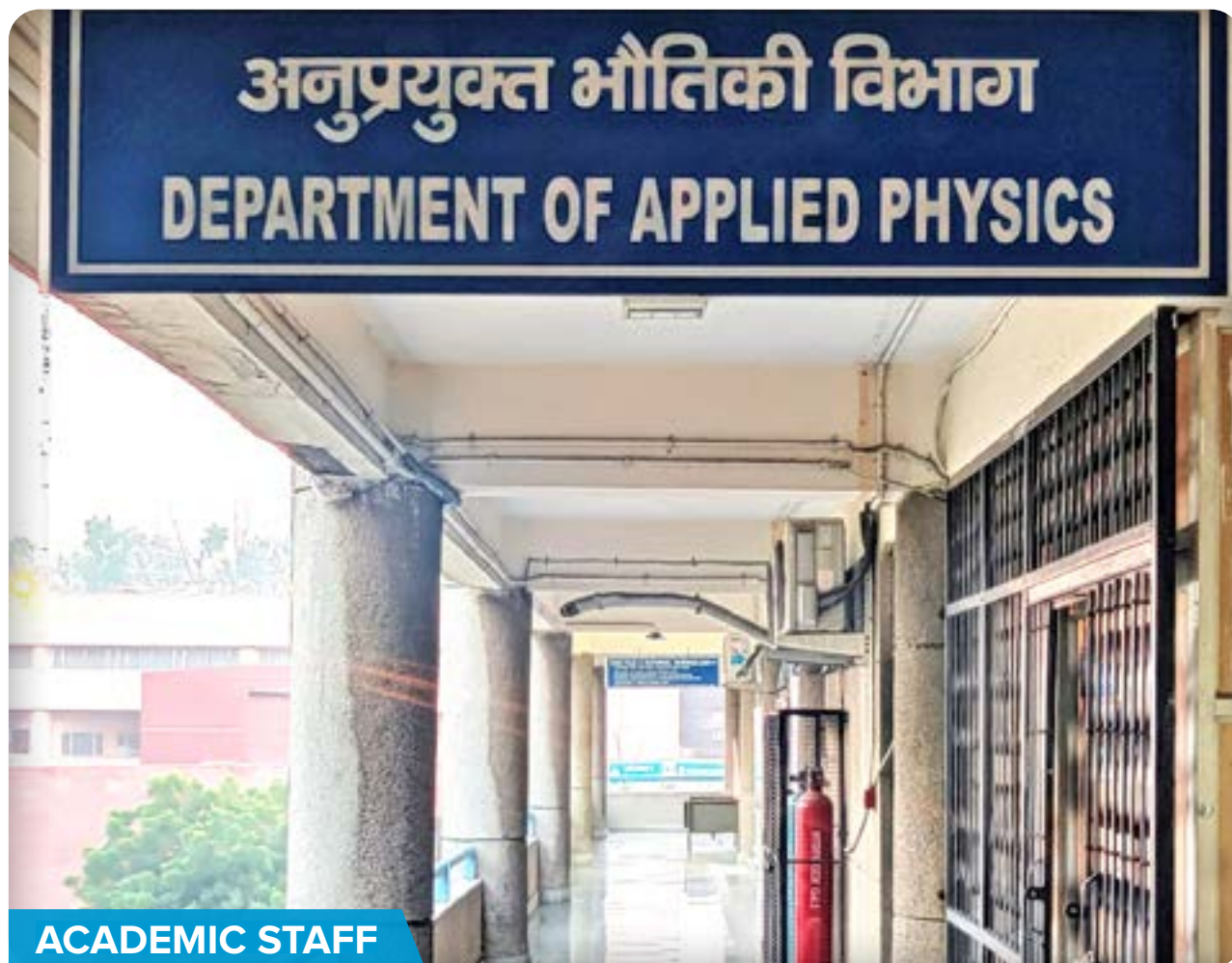
The Department has 27 Labs: Applied Physics Lab, Digital Electronics Lab, FPGA Design Lab, Mobile & Satellite Communication Lab, EMT, Antenna and Propagation Lab, Alternate Energy Storage & Conversion Devices Lab, Condensed Matter Physics Lab, Communication System Lab, Optics Lab, Microprocessor & Interfacing Lab, Fiber Optics & Optical Communication Lab, Microwave Engineering Lab, Advanced Instrumentation Lab, Innovation Lab and many more.

ACHIEVEMENTS

- | | |
|---------------------------|----|
| • Journal Publications | 44 |
| • Conference Publications | 24 |

SALIENT FEATURES

Applied Physics Department is a major department of Delhi Technological University providing cutting edge research, innovation and education in the emerging areas of science and technology. The objective of the department is to create future generations of skilled Engineers and Scientists by providing quality education through cutting edge technologies and innovative teaching techniques so as to make them well equipped to face present and future challenges and their overall sustainable professional growth.



ACADEMIC STAFF

Professors: 06

- **Prof. Rinku Sharma**, Head of Department & Professor, Ph.D. Areas of interest include: Atomic & Molecular Physics, Plasma Physics, THz Radiation Emission and linear non linear properties of low dimensional structures.
- **Prof. R.K. Sinha**, Professor, Ph.D. Areas of interest include: Fibre optics and optical communication.
- **Prof. S.C. Sharma**, Professor & Dean (Acad-PG), Ph.D. Areas of interest include: Plasma Physics/Plasma Applications, Nanotechnology, Dusty Plasma/Strongly Coupled Dusty Plasma, High Power Microwave Devices, THz Radiation Emission/Short Pulse Lasers, FET/MOSFET Devices.
- **Prof. A.S. Rao**, Professor, Ph.D. Areas of interest include: Solid state spectroscopy and atmospheric sciences.
- **Prof. Rishu Chaujar**, Professor, Ph.D. Areas of interest include: Semiconductor device modelling simulation, analysis of MOSFETS & HEMTS for RF & wireless applications.
- **Prof. Nitin K. Puri**, Professor, Ph.D. Areas of interest include: Sensors, Bio-sensors. Nanotechnology, Ion-Beam modification of materials, Thin films.

Assistant Professors: 15

- **Dr. M. S. Mehata**, Asst. Professor, Ph.D. Areas of interest include: Fluorescent spectroscopy, quantum dots, organic leds, thin films.
- **Dr. Pawan K. Tyagi**, Asst. Professor, Ph.D. Areas of interest include: Carbon nanotubes: field emitters, graphene synthesis, single crystal diamond synthesis.
- **Dr. Yogita Kalra**, Asst. Professor, Ph.D. Areas of interest include: Fiber and integrated optics, nano photonics, photonic crystals and their device applications.
- **Dr. M. Jayasimhadri**, Asst. Professor, Ph.D. Areas of interest include: Optical/ fluorescent spectroscopy, Luminescent Materials, Materials science, nanotechnology.
- **Dr. Ajeet Kumar**, Asst. Professor, Ph.D. Areas of interest include: Fiber optics, integrated optics, solar energy.
- **Dr. Amrish K. Panwar**, Asst. Professor, Ph.D. Areas of interest include: Energy storage & conversion devices.
- **Dr. Richa Sharma**, Asst. Professor, Ph.D. Areas of interest include: Multiferroic Magnetolectric Composites, Thermoelectric Materials.
- **Dr. Mukhtiyar Singh**, Asst. Professor, Ph.D. Areas of interest include: Theoretical Condensed Matter Physics, Density Functional Theory.
- **Dr. Renuka Bokolia**, Asst. Professor, Ph.D. Areas of interest include: Ferroelectric ceramics, Upconversion luminescence, Phosphors, Dielectric materials.
- **Dr. Bharti Singh**, Asst. Professor, Ph.D. Areas of interest include: Material Science. Thin films and Nanostructures deposition techniques.
- **Dr. Sarita Baghel**, Asst. Professor, Ph.D. Areas of interest include: Solar Cells and solar materials.
- **Mr. Yogendra Meena**, Asst. Professor, M.Sc. Areas of interest include: Physics.
- **Dr. Deshraj Meena**, Asst. Professor, Ph.D. Areas of interest include: Gas Sensors based on metal oxides.
- **Dr. Kamal Kishor**, Asst. Professor, Ph.D. Areas of interest include: Fibre Optics, Nano Photonics: Devices, Sensors & Components based on Photonic Crystals.
- **Dr. Vinod Singh**, Asst. Professor, Ph.D. Areas of interest include: Synthesis and characterization of functional nanomaterials.



Achievements of the department

- Department of Applied Physics organized One Day E- Workshop on “Orientation session for all students and faculties of institute by Innovation Ambassador” on 29th June, 2021.
- Many Faculty Members of the Department : Recognized as world’s top 2% scientists in the subfields of (i) Applied Physics and (ii) Materials. This list was published by scientists from Stanford University.
- Department of Applied Physics has signed MoU with CSIO- Chandigarh.
- Department has two published patent (2021) in the name of Dr. M.S. Mehata on the title “Apparatus and method for detecting electric field modulated absorption and photoluminescence of a sample and other titled as “System and method for detecting trivalent metal ions.”
- Department has one published patent (2021) in the name of Dr. Rishu Chaujar on the title “A Back Contact Electroplated Thin CIGS Solar Cell”.

Teachers provided with financial support to attend Conferences/Seminars/Symposia/Workshops/Short Term Course/Guest Lecture/GIAN/TEQIP etc.

- Dr. Sarita Baghel received ₹2000/- for attending 1 week FDP on “ 3D printing in product design” on 5th - 9th July 2021 organised by Department of Design, DTU
- Dr. Renuka Bokolia received ₹750/- INR for attending Two Week Online Faculty Development Programme on Managing Online classes and Co- Creating MOOCs-3.0” on 25th July to 10th August, 2020 organised by Ramanujan College

Detail of teachers attending professional development Programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the current year

- Dr. Deshraj Meena attended "Recent Advances, Trends, and Challenges in the field of Nanotechnology" at Amity Centre of Nanotechnology organised by Amity University, Haryana from 12th - 16th July, 2021.
- Dr. Deshraj Meena attended refresher course in Research Methodology (For Sciences) organised by UGC- HRDC DAVV Indore from 15th - 28th December, 2020.
- Dr. Deshraj Meena attended NITTR 08 Online Module organised by AICTE on September - October, 2020.
- Prof. Rishu Chaujar attended One Week online Faculty Development Program on “Nascent Methodologies, Challenges and Realms of Research” organised by Dept. of ECE, DTU from 3rd - 7th October, 2020.
- Prof. Rishu Chaujar attended TEQIP-III sponsored Faculty Development Program (FDP) on “VLSI and Nanotechnology in Energy, Environment, and Neuromorphic Computation” organised by IIT Indore from 21st to 23rd December, 2020.
- Prof. Rishu Chaujar attended One Week Online Short Term Training Program on Information Security In The Era of Deep Learning: Challenges & Opportunities” organised by Dept. of CSE, DTU from 8th - 12th February, 2021.
- Dr. Amrish K. Panwar attended FDP on: Recent Advances, Trends and

- Challenges in the field of Nanotechnology organised by Amity Centre of Nanotechnology and Academic staff college Amity university Haryana from 12th - 16th July, 2021.
- Dr. Amrish K. Panwar attended MHRD Sponsored TEQIP Assisted training course on “Advances Rechargeable Batteries: From powder to Power” organised by Department of Physics & Department of Chemical Engineering, I.I.T. Roorkee (UK) from 25th - 30th December, 2020.
 - Dr. Amrish K. Panwar attended FDP on: Managing Online Classes And Co-Creating MOOCs 3.0 organised by Teaching Learning Centre, Ramanujan College, University of Delhi under the aegis of MHRD PMMMN mission of Teachers and Teaching from 25th July - 10th August, 2020.
 - Dr. Ajeet Kumar attended Orientation session for all students & faculties of institute by innovation ambassador organised by Dept of Applied Physics, DTU on 29th June, 2021
 - Prof. Nitin Kumar Puri attended AICTE Training and Learning (ATAL) Academy FDP on “Application of Computers in Biology” organised by AICTE Training and Learning (ATAL) Academy, Galgotia University from 7th - 11th June, 2021.
 - Dr. Mohan Singh Mehata attended One-week E-faculty Development programme on Wireless sensor networks and internet of things (IOT) organized by School of Engineering and Technology, Sharda University from 18th - 22nd January, 2021
 - Dr. Mohan Singh Mehata Participated in the one-day E-workshop on Orientation Session for all students & faculties of institute by innovation ambassador organised by Department of Applied Physics, DTU on 29th June, 2021.
 - Dr. Mohan Singh Mehata attended Two-week faculty development programme on Managing Online Classes and Co-creating MOOCs 3.0 organized by Teaching Learning Centre, Ramanujan College University of Delhi under the aegis of MHRD from 25th July - 10th August, 2020.
 - Dr. Sarita Baghel attended the International Summit on Quality Indices in Higher Education-2020 organised by DTU from 6th - 7th November, 2020.
 - Dr. Sarita Baghel attended Induction/Orientation Programme organised by Ramanujan College, University of Delhi from 10th November - 9th December, 2020.
 - Dr. Sarita Baghel attended Interdisciplinary Refresher Course on “Advanced Research Methodology Tools and Techniques” organised by Ramanujan College, University of Delhi from 30th - 14th January, 2021.
 - Dr. Sarita Baghel attended Faculty Development Programme on “Blended Learning: Alternative Dimensions” organised by Ramanujan College, University of Delhi from 12th - 29th January, 2021.
 - Dr. Sarita Baghel attended Short Term Course on “Recent Trends in Advanced Materials and Devices” organised by Dr. BR Ambedkar National Institute of Technology, Jalandhar, Punjab from 21st - 25th August, 2020.
 - Dr. Sarita Baghel attended Ethics and values in technical education in context of National Education Policy 2020 organised by Centre for Value Based Education, Delhi Technological University, Delhi from 15th - 19th April, 2021.
 - Dr. Bharti Singh Online Refresher Course in Research Methodology (for Sciences)

- Organised by HRDC-INDORE from 15th - 28th December, 2020.
- Dr. Renuka Bokolia attended Online Refresher Course in Research Methodology (for Sciences) organised by HRDC-INDORE from 15th - 28th December, 2020.
 - Dr. Renuka Bokolia attended One week FDP on Leadership Mastery Through Self-Management organised by Centre for Value Based Education, Delhi Technological University from 19th - 23rd July, 2021.
 - Dr. Renuka Bokolia attended E- workshop on Orientation session for all Students & Faculties of Institute by Innovative Ambassador organised by Applied Physics Department from 29th June, 2021.
 - Dr. Renuka Bokolia attended Five day Online workshop on Inculcating Universal Human Values in Technical Education organised by All India Council for Technical Education (AICTE) from 22nd - 26th March, 2021.
 - Dr. Renuka Bokolia organised by TEQIP III sponsored Online Faculty Development Program on “Advances in Electronic and Photonic Devices for Optical Fibre Communication and Bio-chemical Sensing organised by Centre for Advanced Electronics at IIT Indore from 25th - 27th November, 2020.
 - Dr. M. Jayasimhadri attended One day International webinar on “Recent Advances in Materials Science and Technology (RAMST) organised by Departments of Physics and Chemistry under IQAC, SVCRGDC, Palmaner and S.V. University, Tirupati from 12th July, 2021.
 - Dr. M. Jayasimhadri attended One day E-workshop on “Orientation session for all students and faculties of institute by Innovation Ambassador organised by Department of Applied Physics, Delhi Technological University from 29th June, 2021.
 - Dr. M. Jayasimhadri attended National level workshop on “Recent trends and opportunities in Physics organised by School of Advanced Sciences, VIT-AP University, Andhra Pradesh from 10th-17th April, 2021.
 - Dr. M. Jayasimhadri attended Two day National e-workshop on “Introduction to Origin Software organised by K.L. University, Vijayawada, Andhra Pradesh from 29th & 30th September, 2020.
 - Dr. M. Jayasimhadri attended Five-day FDP on “Recent Advances in Engineering Physics (RAEP-2021) organised by Department of BS&H (Physics), QIS College of Engineering & Technology, Ongole, Andhra Pradesh from 13th - 17th July, 2021.
 - Dr. M. Jayasimhadri attended Two weeks online QIP short term course on “Advances in Energy and Functional Materials organised by Indian Institute of Technology Bhubaneswar (IITBBS) from 13th - 26th June, 2021
 - Dr. M. Jayasimhadri attended Short-term training programme (STTP) on “Emerging Trends in Nanomaterials for Electronic and Optoelectronic Devices organised by Department of Electronics & Communication Engineering, Swarnandhra college of engineering and technology, Narsapur, Andhra Pradesh from 24th - 29th May 2021.
 - Dr. M. Jayasimhadri attended Three days Faculty Development Program on “Virtual Physics Labs organised JNTUA College of Engineering, Ananthapuram, A.P from 7th - 9th September, 2020.

- Dr. M. Jayasimhadri attended One week FDP on “Stress-management organised by Indian Institute of Technology-Madras (IITM) (An AICTE initiative) from 26th - 30th August, 2020

Visit of faculty to other institution for taking Experts’ Lectures/other academic work

1. Prof. Rishu Chaujar worked as a Keynote Speaker for "MOSFET as a Gas Sensor and Chemical Sensor" at Graphic Era University, Dehradun on 4th July, 2021.
2. Prof. Rishu Chaujar worked as a Keynote Speaker for "MOSFET as a Biosensor" at Graphic Era University, Dehradun on 6th July, 2021.
3. Prof. Rishu Chaujar worked as an External Expert for SSPL, DRDO Accelerometer Technology Development (ACCELTECH) on 2nd February, 2021
4. Dr. Amrish K. Panwar, delivered expert lecture in online two days National Conference on: ‘Advances in Theoretical Physics, Material and Atmospheric Science’ (Advances in Rechargeable Battery Technology as Energy Storage) organized by VSKC Govt. Post Graduate College Dakpathar (Vikasnagar) Dehradun, Uttarakhand during 16th - 17th July 2021.
5. Dr. Amrish K. Panwar Participated in online one day Webinar on "Role of National Institutes of Technologies in the Implementation of National Education Policy 2020: Challenges and Solutions" organised by National Institute of Technology Kurukshetra and Shiksha Sanskrit Utthan Nyas New Delhi, held on 17th July, 2021.
6. Dr. Ajeet Kumar, delivered lecture on “Design and Analysis of Specialty Optical Fibers and Waveguides for High Power Laser” in the ICTE Training and Learning (ATAL) Academy Sponsored One Week Online Faculty Development Program (FDP) on Photonics (Active Learning in Optics and Photonics) organised by Department of Physics, Electronics and Photonics, Rajarshi Shahu Mahavidyalaya (Autonomous) Latur, Maharashtra on 03rd - 07th November, 2020.
7. Dr. Ajeet Kumar, delivered a lecture on “Design and analysis of specialty optical fibers and waveguides for high power laser” in the one week AICTE sponsored online Short Term Training Program on “Recent Advances in Nano-Photonics Technology (RANPT-2021)” on 15th - 20th February, 2021
8. Dr. Mohan Singh Mehata delivered an Invited talk on "Production of fluorescent nanoparticles and their applications" in the faculty development program (FDP) on Recent Advances, Trends and Challenges in the field of Nanotechnology, organized by Amity University, Haryana, India on 12-16 July, 2021.
9. Dr. Mohan Singh Mehata delivered an invited talk on Development of fluorescent quantum dots and their applications in the 26th International online webinar on Advances in Physics, Chemistry, Mathematics, Computer Sciences & Biological Sciences (CONIAPSXXVI) organized by Mahatma Gandhi University, Kottayam, Kerala, & International Academy of Physical Sciences (IAPS), Allahabad, India on 18th - 20th December, 2020.
10. Dr. Mohan Singh Mehata delivered invited talk on Synthesis of fluorescent core-shell and metal-doped semiconductor quantum dots and their applications in Fifth International Online Conference on Reuse and Recycling of Materials (Polymers, Wood, Paper, Leather, Glass, Metals, Ceramics, Semiconductors, Water, etc.) and their

products (ICRM – 2020) at Mahatma Gandhi University, Kottayam, Kerala, India on 11th - 13th December, 2020.

11. Dr. Mohan Singh Mehata, delivered an invited talk on Development and applications of nanosized luminescent materials in a RUT (ATU) TEQIP-III sponsored online one-week FDP on “Emerging Trends in Nano Electronics” (ETNE-2020) organized by the Department of Electronics and communication Engineering, Swami Keshvanand Institute of Technology Management and Gramothan (SKIT), Jaipur on 21st - 25th September, 2020.
12. Dr. Mohan Singh Mehata contributed as Session coordinator and Jury member in the Young Scientists Conference “India international science festival 2020, organized by Ministry of Science and Technology, Earth Science, Health and family welfare, Govt. of India in Collaboration of VIBHA and CSIR. on 22nd - 24th December, 2020.
13. Prof. S. C. Sharma delivered an invited talk on Analytical Model to study the effect of alignment mechanism of carbon nanotubes in PECVD chamber in the Remote e-Conference 5th Asia-Pacific Conference on Plasma Physics (AAPPS-DPP 2021) on 26th September - 1st October, 2021.
14. Prof. S. C. Sharma delivered an invited talk on Role of Plasma on the growth and Field Emission Properties of Carbon Nanotubes (CNTs) and its Applications in the HRDC GGV Bilaspur Nanoscience & Nanotechnology and its Applications on 15th - 27th February, 2021.
15. Prof. S. C. Sharma delivered invited talk on Analytical Model to study the effect of presence of water in PECVD chamber on the growth and characteristics of Carbon Nanofibers in the Remote e-Conference 4th Asia

-Pacific Conference on Plasma Physics (AAPPS-DPP2020) on 26th - 31st October, 2020.

16. Prof. R.K. Sinha delivered invited as a speaker on Zero Index Optical Metamaterials: Devices and Applications organized in the IEEE Photonics Society (India) and IISc Bangalore on 15th May, 2021.

Teachers/staff/students who received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the current year

- Dr. Amrish K. Panwar, Assistant Professor, received Research Excellence Award (Commendable) 2021.
- Dr. Mohan Singh Mehata, Assistant Professor, received Research Excellence Award 2021.
- Prof. R. K. Sinha, Professor, received Research excellence award 2021.

Grants for research projects sponsored by the non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution during the current year (INR in Lakhs)

- Dr. Mohan Singh Mehata, Department of Applied Physics, received grant of ₹ 62.17134 from SERB-DST on 2017.
- Prof. Suresh C. Sharma & Prof. Rinku Sharma, Department of Applied Physics, received grant of ₹ 23,93,794/- from Department of Science & Technology (DST), Govt. of India, New Delhi, 2018-2021.
- Dr. Vinod Singh, Department of Applied Physics, received grant of ₹ 14.08 Lakhs from All India Council for Technical Education on 2020.

- Dr. Vinod Singh, Department of Applied Physics, received grant of ₹4.85 Lakhs from Delhi Technological University, 2019.
- Dr. Renuka Bokolia, Department of Applied Physics, received grant of ₹4,83,000/- from Delhi Technological University on 2019.

Detail of awards for innovation won by department/teachers/research scholars/students during the current year NA

- Prof. Rishu Chaujar, received Excellence in Teaching Award 2020 by DTU.
- Prof. Rishu Chaujar received Commendable Research Excellence Award 2021 by DTU.
- Dr. Mohan Singh Mehata received Research Excellence Award 2020 by DTU.
- Prof. Suresh C. Sharma received Commendable Research Award 2021 by DTU.
- Prof. R.K. Sinha received Research Excellence Award 2021 by DTU on 15th February, 2021
- Prof. R.K. Sinha received Gold Skoch Award by Defence Sector on “NVG Compatible Helicopter Visual Landing Aid Solutions for Indian Naval Ships Enabling Night Operations during Critical Missions” 2020.

Number of Collaborative activities for research, faculty exchange, student exchange per year

- Dr. Mohan Singh Mehata collaborate with Russian Academy of Science from 2017 to present (for 3 years) on Joint research project under Indo-Russian (DST-RFBR) scheme financed by DST and RFBR.

- Dr. Mohan Singh Mehata is doing Collaborative research work with National Chiao Tung University (NCTU) from 2019-2024 (for 4 years) financed by NCTU

Detail of student progression to higher education (previous graduating batch) (the current year)

- Pranav Kairon a student of B.Tech in Engineering Physics, Applied Physics is pursuing MS in Physics from UBC.
- Saurav Ahlawat a student of B.Tech in Engineering Physics, Applied Physics is pursuing MS in Aerospace from University of Illinois UIUC.
- Archit Jain a student of B.Tech. in Engineering Physics, Applied Physics is pursuing MS in Electrical - Robotics Track from University of Texas Arlington.
- Samarth Khajuria a student of B.Tech. in Engineering Physics, Applied Physics is pursuing MS in Physics from RWTH Aachen University.
- Anshul Dhingra a student of B.Tech in Engineering Physics, Applied Physics is pursuing MS in Artificial Intelligence from FAU Erlangen.

Students qualifying in state/national/ international level examinations during the current year (eg: NET/SLET/GATE/GMAT/CAT/GRE/TOEFL/Civil Services/ State government examinations)

- Pranav Kairon cleared GATE, GRE and TOEFL exam in 2020.
- Saurav Ahlawat cleared GRE, TOEFL, AFCAT and CpDSE exam in 2020.
- Archit Jain cleared GRE and TOEFL exam in 2020.

- Pranav Mani Tripathi cleared GRE and TOEFL exam in 2020.
- Nipun Sareen cleared GATE exam in 2020.
- Harshal Gudaghe cleared GATE and JAM exam in 2021.
- Aniket Singh cleared GATE and JAM exam in 2021.

Students provided with financial support to attend Conferences / Seminars / Symposia / Workshops / Short Term Course / Guest Lecture

- Durgesh Kumar, Chetan Raj, Vidhu Bhardhwaj received a grant of ₹2000/- for attending conference ICAPIE-2021 on June, 2021 organising by DTU.
- Mukesh received a grant of ₹2000/- for attending conference ICAPIE-2021 on June, 2021 organising by DTU.
- Apra and Ikshvaku received a grant of ₹1500/- for attending International Conference on Energy and Environment on April, 2021 organising by Jyothi Engineering College, Kerala.
- Pranav Mani Tripathi received a grant of ₹64000/- for attending NMDC 2019 on 25th October, 2020 organising by KTH Royal Institute, Sweden.

Detail of professional development / Conferences / Seminars / Symposia/ Workshops / Short Term Course / Guest Lecture / GIAN / TEQIP / administrative training Programmes organized by the department for teaching and non-teaching staff during current year

- Dr. Vinod Singh, DTU organized One Day E- Workshop on “Orientation session for all students and faculties of institute by Innovation Ambassador” on 29th June, 2021.

Number of functional MoUs with institutions of national, international importance, other universities, industries, corporate houses etc. during the last five years (only functional MoUs with ongoing activities to be considered)

- Delhi Technological University signed an MoU with CSIO Chandigarh on 11th February, 2020

Detail of teachers receiving seed money for research in current year (INR in Lakhs)

- Dr. Amrish K. Panwar received a grant of ₹ 4,50,000/- from DTU.
- Dr. Bharti Singh received a grant of ₹ 7,00,000 from DST.
- Dr. Renuka Bokolia received a grant of ₹ 4,83,000/- from DTU.
- Dr. Vinod Singh received a grant of ₹ 4,85,000/- DTU.
- Dr. Richa Sharma received a grant of ₹ 2,88,000/- from DTU.
- Dr. Rishu Chaujar received a grant of ₹ 4,05,000/- from DTU.

4.4 Department of Biotechnology



Prof. Pravir Kumar, HoD

ACADEMIC PROGRAMMES

- B.Tech. (Biotechnology)
Intake: 77
Students Admitted: 76
- M.Sc. (Biotechnology)
Intake: 25+5
Students Admitted: 14
- M.Tech. (Bioinformatics)
Intake: 25+5
Students Admitted: 02
- M.Tech. (Industrial Biotechnology)
Intake: 25+5
Students Admitted: 14
- Ph.D. Research Scholars: 02

LABORATORIES

The department has ten state-of-the-art laboratories, viz. Nano bioelectronics Laboratory, Stem Cell Biology Laboratory, Functional Genomics and Molecular Nanoscience Laboratory, Environmental Biotechnology Laboratory, Plant Molecular Biology Laboratory, Complex systems and genome informatics Lab, Biochemistry Laboratory, Immunotherapeutic Laboratory and Genome Informatics Laboratory.

SALIENT FEATURES

The main objective of the Department is to provide academic training and conduct research in the interdisciplinary areas of biotechnology with particular emphasis on extending the knowledge generated from these studies towards the development of technologies of commercial significance. Research interest of the department include Nano bioelectronics, Neurobiology, Genome Informatics, Immunotherapeutic, plant molecular biology and Environment biotechnology..

ACHIEVEMENTS

- Journal Publications 35
- Conference Publications 7



ACADEMIC STAFF

Professors: 04

- **Prof. Pravir Kumar**, (HOD) Former Dean (Alumni affairs) Ph.D., Postdoctoral research associate and Faculty/Adjunct Faculty, Tufts University School of Medicine (2007-2016), Areas of Interest are Neuroscience, Molecular Medicine, Physiology, Functional genomics, Proteomics, Vascular biology, Medical Biotechnology and Drug screening.
- **Prof. Jai Gopal Sharma**, Ph.D., Post Doc., Areas of Interest are Aquaculture, Industrial Biotechnology, Bioenergy, Environment biotechnology, Amino Acids, Fatty Acids, Bio fuel and Medicinal Chemistry of Plants, Amino Acids, Fatty Acids, Bio fuel and Medicinal Chemistry of Plants.
- **Prof. Yasha Hasija**, Professor in Biotechnology and Associate Dean (Alumni Affairs) Ph.D., Areas of Interest are Genome Informatics, Human Disease Genomics, and Interact omics, Genome Annotation, Integration of genome-scale data for Systems Biology and Personalized Genomics.
- **Prof. Bansi D. Malhotra**, SERB Distinguished fellow, Ex-Professor (Reemployed), Ph.D., Postdoc, Areas of Interest are Nanobiotechnology, biosensors, flexible electronics, Biofuel cells and Self-powered devices.

Assistant Professors: 07

- **Dr. Asmita Das**, Ph.D., Postdoc, Areas of Interest are Cancer Immunotherapeutic, Cellular, and Molecular Immunology and Immunoinformatic.
- **Dr. Navneeta Bharadvaja**, Ph.D., Areas of Interest are Medicinal Plant Biotechnology, Phyto-remediation and Algal Biofuels.
- **Dr. Rashmi Kataria**, (Ramalinga swami re-entry fellow), Ph.D., Postdoc, Areas of Interest are Biorefinery, Bioenergy Bioprocess & fermentation technology, Microbial & industrial Biotechnology.
- **Dr. Smita Rastogi Verma**, Ph.D., Areas of Interest are Molecular Biology and Genetic Engineering.
- **Dr. Prakash Chandra**, Ph.D., Areas of Interest are Nanobiotechnology, Tissue engineering, Nano Toxicology and Bio Microfluidics.
- **Dr. Kriti Bhandari**, Ph.D., M.Sc., Areas of Interest is Biochemical Engineering
- **Dr. Simran Bhullar**, (Ramalinga swami re-entry fellow), Ph.D., Postdoc, Areas of Interest are Gene Regulation and Programmed Genome Rearrangements.



Achievements of the Department

The Department of Biotechnology has been continuously engaged in a research-oriented approach towards concept development. Our courses have been regularly modified in order to develop new skill development and translational courses for better employability. We are engaged in undertaking several projects sponsored by extramural as well as intramural funding. Our department has published more than 40 papers in the current year in several high impact factor journals. Our students have presented their work in several international conferences and have been awarded Best Poster awards as well. Faculty of our department have been invited to deliver plenary lectures in several national and international forums. Our students have successfully graduated and taken up positions in several Ivy League colleges and prestigious institutions for higher education. Students have achieved prestigious international awards like MIT and international fellowships like DAAD etc. Sports and extracurricular activities are also taken very seriously and many students have achieved national level awards in sports as well.

Participation in Professional Development Programmers by our Faculties

- Dr. Yasha Hasija completed GSuite for Education Training organized by Techno@Team on 4th July, 2020.
- Dr. Yasha Hasija attended One-week STTP on Structural Audit for Earthquake Safety” jointly organized by National Institute of Disaster Management, Ministry of Home Affairs, Govt. of India, Delhi and Dept. of Civil Engineering, Delhi Technological University, Delhi during 24th - 28th November, 2020.
- Dr. Yasha Hasija completed TEQIP III sponsored one week online International Faculty Development Programme on Machine Learning and Computer Vision: Applications, Research Challenges” jointly organized as a twinning programme by National Institute of Technology, Silchar, Assam from 24th - 28th August, 2020.
- Dr. Yasha Hasija completed one week Faculty Development Programme on “Ethics and Values in Technical Education in Context of National Education Policy 2020” organized by Centre for Value Based Education, Delhi Technological University from 15th - 19th April, 2021.
- Dr. Navneeta Bharadvaja attended UGC STRIDE online Workshop on “Molecular Phylogeny and Molecular Docking” held from 19th - 27th January, 2021 at the Mizoram University, Aizawl, Mizoram.
- Dr. Navneeta Bharadvaja attended International Summit on Quality Indices in Higher Education - 2020, held during 6th - 7th November, 2020 at Delhi. Technological University, Delhi.
- Dr. Navneeta Bharadvaja attended Online Faculty Development Program, "Outcome Based Engineering Education and Accreditation (OBEEA 2020)", sponsored by TEQIP-III, organized by NIT Meghalaya during 21st -23rd September, 2020.
- Dr. Asmita Das attended Faculty Development Program on “Leadership mastery through self- management” organized by DTU and Heartfulness Education Trust 19th July- 23rd July 2021.
- Dr. Asmita Das attended Faculty Development Program 15th - 19th April 2021 “Ethics and Values in Technical Education in the context of NEP 2020” organized of DTU.

- Dr. Asmita Das took short term training program on Information Security in the Era of Deep Learning: Challenges & Opportunities organized by DTU from 8th - 12th February, 2021.
- Dr. Asmita Das attended One Day Workshop on 22nd May, 2021 “Research Methodology” organized by Shree Vidyanikethan Engineering College.
- Dr. Smita Rastogi attended FDP on ‘Good Laboratory Practices’ organized by School of Basic Sciences and Research, Sharda University, Greater Noida from 8th - 12th, Feb 2021.
- Dr. Rashmi kataria attended One week Faculty Development Program on “Leadership Mastery Through Self-Management” Delhi Technological University (DTU), Delhi from 19th - 23rd July 2021.
- Dr. Rashmi kataria attended One-week Training by AICTE Training and Learning (ATAL) Academy “Drug Discovery & Design in 21st Century” Netaji Subhas University of Technology, Delhi from 5th - 9th July 2021.
- Dr. Rashmi Kataria attended One week FDP “Ethics and Values in Technical Education in Context of National Education Policy 2020”, Delhi Technological University (DTU), Delhi from 15th - 19th April 2021.
- Dr. Rashmi kataria attended International conference on innovation in Biotechnology and Life Sciences, Delhi Technological University, Delhi, India from 18th-20th December 2020.
- Dr. Rashmi Kataria attended One-week International e-workshop on bioinformatics held in Delhi Technological University, Delhi, India from December 14th - 18th, 2020.
- Dr. Rashmi Kataria attended Faculty development programme “Nascent Methodologies, Challenges and Realms of Research” Department of Electronics and Communication Engineering, Delhi Technological University, Delhi, India from 03-07 October 2020.
- Dr. Smita Rastogi attended FDP on Bioinformatics’ organized by Department of Biotechnology, DTU, Delhi from 14th - 18th December, 2020.
- Dr. Smita Rastogi attended FDP on ‘Looking at Life Differently - A Fallout of COVID-19 Pandemic’ organized by Department of Biochemistry Dr. Rammanohar Lohia Avadh University Ayodhya from 5th - 8th August, 2020.
- Dr. Kriti Bhandari attended International Faculty Development Programme (FDP) on “The Art of Doing Research” jointly organized by Jyothi Engineering College, Thrissur, India, & Pelita University, Indonesia from 12th - 24th July, 2021.
- Dr. Kriti Bhandari attended International virtual conference on Role of micronutrients: Immunity & Health organized by Department of Nutrition & Dietetics organised by Department of Physiotherapy in collaboration with Society for Agriculture & Allied Research (SAAR) from 18th - 19th June, 2021.
- Dr. Kriti Bhandari attended One day e-workshop on World Food Safety Day organized by Centre for Quality & Food Safety and Sharda University, on 7th June, 2021.
- Dr. Kriti Bhandari attended International virtual Conference on "Innovations in Biotechnology and Life Sciences" organized by Department of Biotechnology, Delhi Technological

University from 18th - 20th December, 2020.

- Dr. Kriti Bhandari attended DTU-sponsored one-week International E-Workshop on Bioinformatics organized by Department of Biotechnology, Delhi Technological University, Delhi from 14th - 18th December, 2020.
- Dr. Kriti Bhandari attended One week E- FDP on "Soft Skills: Mentoring Skills and Emotional Intelligence in Education" organized by Bharat Institute of Engineering and Technology Hyderabad from 5th - 10th October, 2020.
- Dr. Kriti Bhandari attended TEQIP III Sponsored One week Online Short-term Course on "Intellectual Property Rights" organized by Department of Chemistry, Dr. B. R. Ambedkar National Institute of Technology Jalandhar, Punjab, India from 7th - 11th September, 2020.

Faculty visit to other institutions for taking Experts' Lectures and other academic works

- Prof. Pravir Kumar, presented a lecture on "Artificial intelligence and machine learning in drug designing and medicine" from 30th - 31st July, 2020.
- Prof. Pravir Kumar attended Two day webinar on "Drug discovery and development with Machine learning and Artificial intelligence" at National Institute of Pharmaceutical Education and Research (NIPER), Kolkata.
- Prof. Pravir Kumar presented a lecture on "Post translational modifications and Neurological disorders", in 34th annual conference on SNCI, December 11-13, 2020), University of Hyderabad [Speaker and Session co-chair].

- Prof. Jai Gopal Sharma served as Course Co-coordinator in online Refresher Course on "Life Sciences at Centre for Professional Development in Higher Education (CPDHE), UGC-HRDC", University of Delhi held from 25th January – 8th February, 2021.
- Prof. Jai Gopal Sharma Served as Chairman in One-week international e-workshop on Bioinformatics held at Department of Biotechnology, Delhi Technological University, Delhi from 14th - 18th December, 2020.
- Prof. Jai Gopal Sharma Served as Patron in International Conference on Innovations in biotechnology and life sciences held at Department of Biotechnology, Delhi Technological University, Delhi from 18th - 20th December, 2020.
- Prof. Bansi D. Malhotra presented Invited talk at the National Seminar on "Nanomaterials: Fundamentals and applications", during 23rd - 24th May, 2021 at Indira Gandhi University, Meerpur, Rewari.
- Prof. Bansi D. Malhotra was invited for 5-day FDP on "Sensor's fabrication and its application in IOT" from 2nd - 6th July, 2021 at Graphic Era University Dehradun.
- Prof. Bansi D. Malhotra was invited as speaker to FDP on "Drug Discovery and Design in 21st Century" from 5th - 9th July, 2021, at NSUT Dwarka.
- Dr. Yasha Hasija was invited as Panel speaker in "Second Engineering, Medicine, biology, and Healthcare Research and Innovation Colloquium" organized by IEEE BUET on 9th June, 2021.
- Dr. Yasha Hasija was invited as speaker in short term summer course for UG

students of University of Delhi on “Bioinformatics: An Introduction for Beginners” by Miranda House, University of Delhi for the Topic Machine Learning: A plethora of Applications on 22th July, 2020.

- Dr. Yasha Hasija was invited as speaker in short term summer course for UG students of University of Delhi on “Bioinformatics: An Introduction for Beginners” by Miranda House, University of Delhi for the Topic Sequence Alignment on 6th July, 2020.
- Dr. Asmita Das was Invited for lecture in 2nd International Conference on Environment, Agricultural, Chemical and Biological Sciences from 24th - 26th January, 2021 organized by Voice of Indian Concern for the Environment (VOICE) in association with CAFRE, University of Pisa, Italy; Murray State University, Murray, Kentucky, USA; GLA University, Uttar Pradesh; Mercy College, Kerala; DM College of Science.

Students pursuing Higher Education

- Ms. Sneha Iyer an alumna of B.Tech. Biotechnology is pursuing MS in Biomedical Engineering from UCSD.
- Mr. Udiptya Saha an alumna of B.tech Biotechnology is pursuing Direct Ph.D, Applied Mechanics Department, IIT Madras.
- Ms. Aparna Chauhan an alumna of B.tech Biotechnology is pursuing M.Tech in Biomedical Engineering, BSBE, IIT Bombay.

Students' Achievements

- Mr. Udiptya Saha qualified GATE.
- Mr. Siddhant Rajkumar qualified CAT examination.

- Ms. Aparana Chauhan qualified GATE examination.
- Mr. Sidharth Bhasin qualified GATE examination.
- Ms. Sneha Iyer qualified GRE examination.

Teachers Receiving awards from Govt. Recognized Bodies

- Prof. Pravir Kumar was awarded with Commendable Research Award by Delhi Technological University in 2021.
- Prof. Jai Gopal Sharma received education excellence award 2021 by Dr. Swarn Chawla memorial foundation world environment summit 2021 organized by ESDA, Delhi.
- Prof. Jai Gopal Sharma was awarded with Commendable Research Award by Delhi Technological University.
- Prof. Bansi D. Malhotra received Commendable research excellence award 2020 by Delhi Technological University, Delhi for 3 research papers in 2021.
- Dr. Yasha Hasija was awarded with Premier Research Award by Delhi Technological University.
- Dr. Navneeta Bharadvaja was awarded with Commendable Research Award by Delhi Technological University.
- Dr. Asmita Das was awarded with Commendable Research Award by Delhi Technological University.

Details of Awards for Innovation won by the Department

- Mr. Namit Dey, PhD Student, Dept. of Biotechnology, DTU is jointly working at CSIR-Institute of Genomics and Integrative Biology (IGIB), New Delhi.

- Ms. Neha Kumari, PhD Student, Dept. of Biotechnology, DTU is jointly working at ICGEB, New Delhi.
- Ms. Debleena Guin, PhD student, is jointly working at DRDO, New Delhi
- Ms. Kritika Sharma, PhD student, is jointly working at IGIB, New Delhi.
- Mr. Manish Kumar Mishra, PhD student, jointly working at IGIB, New Delhi.
- Ms. Megha Kumari, PhD student, Department of Biotechnology is jointly working at IGIB, New Delhi.
- Ms. Shivangi Joshi, PhD student, Department of Biotechnology is jointly working at IGIB, New Delhi.
- Mr. Avinash, PhD student, Department of Biotechnology is jointly working at Delhi University.
- Ms. Meenakshi, PhD student, Department of Biotechnology is jointly working at JNU
- Ms. Poonam, Phd Student, Department of Biotechnology is jointly working at Jamia Hamdard.
- Ms. Anisha, PhD Student, Department of Biotechnology is jointly working at INARI.
- Mr. Neelesh, PhD student, Department of Biotechnology is jointly working at Delhi University.
- Mr. Navneet, PhD student, Department of Biotechnology is jointly working at JNU.

Staff Training:

- Mr. Chhail Bihari participated in International Conference on Innovation in Biotechnology and Life Sciences, from 18th to 20th December, 2020.

Teachers Receiving Seed Money for Research

- Dr. Asmita Das received ₹3 lakhs in 2019 for 3 years for DTU Project.
- Dr. Rashmi Kataria received ₹53 Lakh Project grant: SERB Project in December, 2020 (EEQ/2020/000614) for three years.
- Prof. B. D. Malhotra received a grant of ₹ 1 Cr for 5 years under the SERB Distinguished Fellowship (Department of Science and Technology, Govt. of India).

4.5 Department of Civil Engineering

Prof. Vijay Kumar Minocha, HoD



ACADEMIC PROGRAMMES

- B. Tech. (Civil Engineering)
Intake: 152
Students Admitted: 151
- B. Tech. [Civil Engg. (Cont. Edu.)]
Intake: 60
Students Admitted: 22
- M. Tech. (Geotechnical Engineering)
Intake: 25+5
Students Admitted: 23
- M. Tech. (Hydraulics & Water Resources Engineering)
Intake: 24+5
Students Admitted: 10
- M. Tech. (Structural Engineering)
Intake: 25+5
Students Admitted: 28+01 (SPN)
- M.Tech. (Geoinformatics)
Intake: 25+5
Students Admitted: 11
- Ph.D. Research Scholars: 22

LABORATORIES

The Department is well equipped with laboratories related to Structural Engineering, Concrete testing, Soil Mechanics, Highway Engineering, Remote Sensing & GIS NS Hydraulics Laboratories.

SALIENT FEATURES

Traditionally Civil Engineering has played an important role in improving the civic life of society by harmonizing the natural resources available on earth. Some of the major areas in the field of Civil Engineering are design and construction of various structures like bridges, buildings, roads, tunnels, and dams, developing new construction technologies, Design and development of Foundation systems, Geotechnical Engineering, Transportation and Traffic Engineering, surveying, GIS & Remote Sensing, and Hydraulics & Water Resources Engineering. Besides the basic and engineering sciences the curriculum in Civil Engineering covers various professional subjects on structures, foundations, construction, works management and cost, transportation engineering, irrigation engineering, hydraulics, environmental engineering, and earthquake technology, etc.

ACHIEVEMENTS

- | | |
|---------------------------|----|
| • Journal Publications | 23 |
| • Conference Publications | 6 |
| • Book Chapters | 1 |



ACADEMIC STAFF

Professors: 15

- **Prof. V. Kumar Minocha (HOD)**, B.E., M.Tech., Ph.D. Water Resources. Area of Interest is Environmental Engineering.
- **Prof. Nirendra Dev**, B.Tech., M.Sc. (Engg.), Ph.D. Structural Engineering. Areas of interests are Structural Engg., Structural Dynamics, Finite Element Method, Disaster Management, High Strength Nano Composites, Concrete Technology.
- **Prof. Anil Kumar Sahu**, B.E., M.E., Ph.D. Area of Interest is Geotechnical Engineering.
- **Prof. Ashutosh Trivedi**, B.Sc. (Engg.), M.Tech., Ph.D. Geotechnical Engineering. Areas of Interest are Civil Engineering, Geotechnical Engineering, Rock Mechanics, Soil Dynamics.
- **Prof. Ashok Kumar Gupta**, B.Sc. (Rohilkhand Univ.), B.Tech.(Hons) (Avadh Univ., KNIT Sultanpur), M.Tech. (Kurukshetra Univ., REC Kurukshetra), Ph.D. (IIT Bombay). Areas of Interests are Geoenvironmental Engineering, Ground Improvement Techniques, Stability of Tunnels, Settlement of Foundations.
- **Prof. K.C. Tiwari (Retd. Col)**, M.E. (CAD), Ph.D. Microwave/Optical Remote Sensing, GIS, Expert Systems, Image Processing. Areas of Interests are Geoinformatics and its applications in Civil Engineering, Disaster management, Optical and Microwave remote sensing, GIS, Hyperspectral and SAR data processing, Camouflaged Target detection, Super resolution mapping, Satellite Image Processing Artificial intelligence.
- **Prof. Amit Kumar Shrivastava**, B.E. (Civil), M.E. (Civil), Ph.D. (Civil). Areas of Interests are Geotechnical Engineering, Rock Mechanics, Pile Foundation, Geo Environmental Engineering.

- **Prof. Rakesh Kumar**, M.Tech., Ph.D. Fluid Mechanics. Areas of Interests are Hydraulics and Water Resources: Model studies through CFD softwares.
- **Prof. Alok Verma**, M.Tech. Structural Engineering, Ph.D., Areas of Interests are Earthquake technology and use of fuzzy logic and neural networking in the area of durability studies.
- **Prof. Awadhesh Kumar**, M.E. (CAD) [UoR;R (1993)], Ph.D.[IIT;R (2001)]. Areas of Interests are Cementitious Products, Tall Buildings and Non-Linear Analysis using Finite Element Method.
- **Prof. Naresh Kumar**, M.Tech, (NIT, Kurukshetra); Ph.D. (University of Delhi). Areas of Interests are Deep Foundations; Experimental testing on load carrying capacity of Innovative Piles; IPR Laws.
- **Prof. S. Anbu Kumar**, B.E. (Civil), M.Tech. (IIT Madras), Ph.D. (DTU), Areas of Interests are Fluid Mechanics, Hydraulics and Water Resource Engineering.
- **Prof. Raju Sarkar**, B.E., M.E., Ph.D. Soil Mechanics. Areas of Interests are Geotechnics for Natural Disaster Mitigation, Soil-Structure Interaction, Environmental Geotechnology, Pavement Geotechnology, Ground Improvement technique, Numerical Modeling.
- **Prof. Munendra Kumar**, M.E., Ph.D. Fluid Mechanics. Areas of Interests are Fluid Mechanics, and Hydraulics.
- **Prof. T. Vijay Kumar**, B.E., M.E., Ph.D., Areas of Interests are Environmental Engineering, Fluid Mechanics & Hydraulics.

Associate Professors: 06

- **Mr. G.P. Awadhiya**, M.Tech. Structures, Area of Interest is Structural Engineering.
- **Mr. Narad Muni Prasad**, M.Sc. Civil (Transportation), Area of Interest is Pavement Engineering.
- **Mr. Susheel Kumar**, B.Tech., M.Tech. Area of Interest is Traffic and Transportation Engineering.
- **Mr. A.R. Kongan**, B.E., M.E. Soil Mechanics & Foundation Engg. Areas of Interests are Structural Engineering and Transportation Engineering/Prestressed Concrete, High Rise Buildings, Collapsible and Expansive soils.
- **Dr. Shilpa Pal**, B.E., M.E., Ph.D. Area of Interest are Seismic Analysis of Dam and Slope Stability Studies, Disaster Risk Reduction Studies, Biofortified Concrete, Green Material in Construction
- **Dr. Pradeep K. Goyal**, B.E., M.E., Ph.D. Area of Interest are Cyclone Disaster Mitigation, Microzonation, Hazard analysis and risk assessment, reliability analysis, soft computing techniques, materials, rural housing.

Assistant Professors: 04

- **Mr. B.R.G. Robert**, B.E. Civil Engineering. Areas of Interest are Geology, Surveying, Building Materials & Construction.
- **Dr. Bharat Jhamnani**, B.E., M.E. Ph.D. Area of Interest is Hydraulics Engineering.
- **Dr. Ritu Raj**, Ph.D., Areas of Interest are Structural Engineering, Wind Engineering.
- **Mr. Hrishikesh Dubey**, B.E., M.Tech. Areas of Interest are Structure Engineering, Earthquake Engineering.

Detail of teachers attending professional development Programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the current year

- Dr. Shilpa Pal attended two week refresher course on “Engineering Physical Sciences and Management” held from 19th to 31st October, 2020 with A+ organized by BVICAM, New Delhi.
- Dr. Shilpa Pal attended online Faculty Development Program on “Nascent Methodologies, Challenges and Realms of Research” held from 3rd to 7th October, 2020 organized by Department of Electronics and Communication Engineering, Delhi Technological University, Delhi, India.
- Dr. Shilpa Pal attended one week AICTE Training and Learning (ATAL) Academy online FDP "Underground Space Utilization" from 18th - 22th January, 2021 organized by Zakir Husain College of Engineering and Technology, AMU, Aligarh.
- Dr. Shilpa Pal attended one week online FDP "Ethics and Values in Technical Education in Context of National Education Policy 2020' from 15th – 19th April, 2021 organized by Centre for Value Education, DTU, Delhi.
- Dr. Shilpa Pal attended one week AICTE Training and Learning (ATAL) Academy online FDP "Sustainable Construction Materials" from 5th to 9th July, 2021 organized by Rajasthan Technical University, Kota
- Dr. Ritu Raj attended online Faculty Development Program on "Orientation towards Technical Education and Curriculum Aspects" organised by All India Council for Technical Education on February, 2021.
- Dr. Ritu Raj attended online Faculty Development Program on "Professional Ethics and Sustainability " organised by All India Council for Technical Education on February, 2021.
- Dr. Ritu Raj attended online Faculty Development Program on "Communication Skills, Modes and Knowledge Dissemination" organised by All India Council for Technical Education on February, 2021.
- Dr. Ritu Raj attended online Faculty Development Program on "Instructional Planning and Delivery" organised by All India Council for Technical Education on February, 2021.
- Dr. Ritu Raj attended online Faculty Development Program on "Technology Enabled Learning and Life-Long Self Learning" organised by All India Council for Technical Education on February, 2021.
- Dr. Ritu Raj attended online Faculty Development Program on "Student Assessment and Evaluation" organised by All India Council for Technical Education on February, 2021.
- Dr. Ritu Raj attended online Faculty Development Program on "Creative problem Solving, innovation and Meaningful R&D" organised by All India Council for Technical Education on February, 2021.
- Hrishikesh Dubey attended online Faculty Development Program on "Orientation towards Technical Education and Curriculum Aspects" organised by

- All India Council for Technical Education on February, 2021.
- Hrishikesh Dubey attended online Faculty Development Program on "Professional Ethics and Sustainability" organised by All India Council for Technical Education on February, 2021.
 - Hrishikesh Dubey attended online Faculty Development Program on "Communication Skills, Modes and Knowledge Dissemination" organised by All India Council for Technical Education on February, 2021.
 - Hrishikesh Dubey attended online Faculty Development Program on "Student Assessment and Evaluation" organised by All India Council for Technical Education on February, 2021.
 - Hrishikesh Dubey attended online Faculty Development Program on "Creative problem Solving, innovation and Meaningful R&D" organised by All India Council for Technical Education on February, 2021.
 - Hrishikesh Dubey attended online Faculty Development Program on "Institutional Management and Administrative Procedures" organised by All India Council for Technical Education on February, 2021.
 - Dr. Shilpa Pal delivered an expert talk on topic "Influence of Modelling Discontinuities in Dam and its Foundation" on 23rd January, 2021 in the Webinar organized by Indian Association of Structural Engineers on Structural Engineering for Sustainable Development.
 - Dr. Shilpa Pal delivered a Keynote lecture on topic "Conceptual Design of Earthquake Resistant Buildings and Safety Measures" on 9th December, 2020 in the AICTE Sponsored Six Days Online STTP on "Life Cycle Assessment and Structural Health Monitoring of Structures" (PHASE-III) organized by Department of Civil Engineering, Aarupdai Veedu Institute of Technology, Salem, TN held from 7th to 12th December, 2020.
 - Dr. Shilpa Pal delivered a Keynote lecture on topic "Seismic Conceptual Design of Buildings" on 23rd November, 2020 in the Five Days Online STTP on "Seismic Structural Safety Audit of Structures" organized by Department of Civil Engineering, DTU in collaboration with NIDM (Ministry of Home Affairs, New Delhi), held from 23rd - 27th November, 2020.
 - Prof. A K Sahu delivered a lecture on "Microscopic Study of Fine-Grained Soil" on October 8, 2020 at M. M. M. University of Technology Gorakhpur (U.P.)
 - Prof. A K Sahu delivered a Keynote lecture on topic " Geosynthetic and natural fiber" on November 7, 2020 at Rajkiya Engineering College Ambedkar Nagar, U.P., India.

Visit of faculty to other institution for taking Experts' Lectures/other academic work

- Dr. Shilpa Pal delivered an expert talk on topic "Seismic effect on Structures" on 6th April, 2021 in the AICTE _ ISTE Refresher Programme on Earthquake Resistant Design organized by Govt. Polytechnic, Bolangir, Odisha.

Students undertaking field projects / internships

- Aditya Kumar Jha from Civil Engineering done Training of Soft Computing Skills in Civil Engineering from 21st June to 14th August 2021.
- Obaid Khan from Civil Engineering done Training of Soft Computing Skills in Civil Engineering from 21st June to 14th August 2021.
- Arman Alam from Civil Engineering done Training of Soft Computing Skills in Civil Engineering from 21st June to 14th August 2021.
- Gaurav Solanki from Civil Engineering done Training of Soft Computing Skills in Civil Engineering from 21st June to 14th August 2021.
- Faizan Ahmad from Civil Engineering done Training of Soft Computing Skills in Civil Engineering from 21st June to 14th August 2021.
- Athar Mohammed from Civil Engineering done Training of Soft Computing Skills in Civil Engineering from 21st June to 14th August 2021.

- Ishu Surender from Civil Engineering done Training of Soft Computing Skills in Civil Engineering from 21st June to 14th August 2021.
- Amartya Sinha from Civil Engineering done Training of Soft Computing Skills in Civil Engineering from 21st June to 14th August 2021.

Teachers / staff / students who received awards and recognition at National, International level during the current year

- Dr. Shilpa Pal received Research Excellence Award in 2021.

Detail of training Programs organized by the department for teaching and non-teaching staff during current year

- Dr. Raju Sarkar and Dr. Shilpa Pal organised a program on Seismic Structural Safety Audit of Structures from Nov. 23-27, 2020 organised by DTU and sponsored by Ministry of Home Affairs, Govt. of India.

4.6 Department of Computer Science and Engineering

Prof. Rajni Jindal, HoD



ACADEMIC PROGRAMMES

- B. Tech. (Computer Engineering)
Intake: 452
Students Admitted: 452
- M. Tech. (Computer Science and Engineering)
Intake: 25+5
Students Admitted: 26+1 (SPN)
- Ph.D. Research Scholars: 27

LABORATORIES

Department has developed state-of-the-art laboratories in the various fields of Computer Engineering- Computer Architecture Lab, Computation and programming Lab, Artificial Intelligence Lab, Linux Android Network Systems Lab, Samsung Digital Research Academy Lab and Big Data Lab, many others.

ACHIEVEMENTS

- | | |
|---------------------------|-----|
| • Journal Publications | 50 |
| • Conference Publications | 123 |
| • Book Chapters | 1 |

SALIENT FEATURES

The Department of Computer Science and Engineering endeavors to provide the thrill of a corporate R&D environment with a planned focus on industrially relevant projects and technology incubation. The curriculum defined, lays greater emphasis on design principles and development of system software for operating systems, Database management systems, data mining, computer graphics and networks. Currently the department offers Doctorate, post-graduate & undergraduate courses in fields of Computer Engineering. The department also has an active student chapter of Computer Society of India (CSI) and Society of Software Engineering which contribute significantly in professional activities undertaken by IEEE and IET student's chapters. The B. Tech (CSE) program has an NBA accreditation.



ACADEMIC STAFF

Professors: 04

- **Prof. Rajni Jindal (HOD)**, M.C.A., M.E., Ph.D., Areas of Interest are Database Systems, Data Mining and Operating Systems
- **Prof. Rahul Katarya**, B.Tech., M.Tech., Ph.D., Areas of Interest are Big Data Analytics, Social Networks Analysis, Human Behaviour, Multimedia Systems, Internet Technologies, Web Mining, Data Mining
- **Prof. Anil Singh Parihar**, B.Tech., M.E., Ph.D., Areas of Interest are Pattern Recognition, Computer Vision, Soft Computing, Image Processing, Evolutionary Computing, Biometric Systems, Artificial Intelligence
- **Prof. Shailendar Kumar**, B.E., M.Tech., Ph.D., Areas of Interest are Database Systems, Datamining, Big Data Analytics, Machine Learning, Information Security, Compiler Construction, Computer Network

Emeritiuous/Adjunct Faculty: 01

- **Prof. Daya Gupta**, M.Sc., Post M.Sc. Diploma (Computer Sc.), Ph.D., Areas of Interest are Software Engineering, Artificial Intelligence, Data Mining and Security

Associate Professors: 03

- **Dr. Vinod Kumar**, B.E., M.Tech., Ph.D., Area of Interest is Computer Network
- **Dr. Manoj Kumar**, B.Tech., M.Tech., Ph.D., Area of Interest is Information Security
- **Dr. Aruna Bhat**, B.Tech., M.Tech., Ph.D., Areas of Interest are Machine Learning and Pattern Recognition, Campus Incubators

Assistant Professors: 15

- **Dr. Akshi Kumar**, B.E., M.Tech., Ph.D., Areas of Interest are Web Technologies, Text Mining, Sentiment Analysis, Recommender Systems, Social & Semantic Web, User-generated Big-Data, Internet-of-Everything
- **Dr. Rajesh Kumar Yadav**, B.E., M.Tech., Ph.D., Areas of Interests are Mobile Computing, Wireless Sensor Network, Computer Networks, Theory of Computation, PCA
- **Dr. Prashant Giridhar Shambharkar**, B.E., M.Tech., Ph.D., Areas of Interest are Data Mining, Real Time Systems, Programming Fundamentals, Mobile Health Monitoring
- **Dr. Rohit Beniwal**, B.Tech., M.Tech., Ph.D., Areas of Interest are Social Web, Semantic Web, Software Engineering, Machine Learning.
- **Ms. Minni Jain**, B.Tech., M.Tech., Pursuing Ph.D., Areas of Interest are Natural Language Processing, Sentiment Analysis, Information Security
- **Mr. Nipun Bansal**, B.Tech., M.Tech., Pursuing Ph.D., Areas of Interest are Information Security, Biometric Security, Network Security
- **Dr. Sanjay Kumar**, B.Tech., M.Tech., Ph.D., Areas of Interest are Social Network Analysis, Database Systems, Data Science, Information Security and Algorithms
- **Dr. Rajeev Kumar**, B.Tech., M.Tech, Ph.D., Post-Doc Areas of Interest are Steganography, Reversible data hiding, Wireless Sensor Networks, DeepFakes.
- **Dr. Pawan Singh Mehra**, B.E., M.Tech(Hons), Ph.D. Areas of Interest are Internet of Things, Wireless Networks, Cryptography and Network Security, Quantum Cryptography.
- **Dr. Ashish Girdhar**, B.E , M.Tech, Ph.D Area of Interest are Image processing, machine learning
- **Mr. Anurag Goel**, B.Tech., M.Tech. (Gold Medalist), Ph.D. (Pursuing from IIIT Delhi). Areas of Interest are Machine Learning, Deep Learning, Deep Clustering, Graph Algorithms.
- **Mr. Kavinder Singh**, B.Tech, M.Tech, Ph.D. (pursuing), Area of interest are Digital Image processing, Computer Vision, Pattern Recognition, Deep learning, Machine learning
- **Ms. Anukriti Kaushal**, B.Tech , M.tech, Ph.D. (Pursuing). Area of interest are Data structures and Algorithm, Network and Information Security, Machine Learning, Deep learning, Recommender system
- **Ms. Garima Chhikara**, B.Tech, M.Tech, Area of Interest : Algorithms, Computer Vision, Deep Learning.
- **Ms. Gull Kaur**, B.Tech, M.Tech, Ph.D.(Pursuing). Area of Interests are Artificial Intelligence, Machine Learning and Deep Learning

Achievements of the Department

- Ten new faculty recruited in the department.
- MOU between Media and Data Science Research Lab, Adobe Inc. (Principal place California USA) and DTU (Machine Learning Research Lab, Dept. CSE, Faculty Incharge Prof. Anil Singh Parihar). It will provide an excellent opportunity for the students of DTU to work on the industry-relevant problems in the area of computer vision, NLP, and Deep Learning under joint mentorship
- Many B.Tech students have published papers in reputed International journals/conferences and two groups have published research papers in IEEE Transactions.
- Four groups of DTU students have founded Startups under DTU Innovation and incubation foundation.
- 14 students in GATE, 15 students in CAT, 12 students in GRE, 7 students in TOEFL, 6 students in IELTS and 2 students in GMAT secured good ranks.
- One of the alumna Ms. ANKITA JAIN secured 3rd rank in recently declared UPSC Civil Services results in 2020.
- One of the alumni Mr. Rohit Chadda who co-founded Food Panda and PAYLO appointed as Group Chief Strategy Officer of Network 18 Digital.
- Six students joined IIM for higher studies.
- Eight students joined world's top ranked universities for M.S. and PhD.
- Average placement package was more than 16 lacs.
- The highest package was bagged by Ms. Sakshi Vats for 1.12 crores from Amazon.

- Three students bagged 51.75 lacs package.
- Most of the students got lucrative internship and one of them was in Snapdeal for ₹ 83000/month.

Teachers provided with financial support to attend Conferences, Seminars, etc

- Mr. Rahul received ₹7500/- for attending 4th International Conference on I-SMAC by SCAD Institute of Technology.
- Mr. Rahul received ₹600/- for attending FDP on “Advanced Pedagogical Techniques” at Ramanujan College.
- Mr. Rahul received ₹10000/- for attending Online MOOC Courses by NITTT.
- Mr. Rahul received ₹1000/- for attending Research Methodology.
- Mr. Rahul received ₹9500/- for attending 5th International Conference on Inventive Systems and Control ICISC 2021.
- Dr. Sanjay Kumar received ₹70000/- for attending MOOC and Digital Content for E-Learning under TEQIP- III Project, DTU.
- Mr. Anurag Goel received ₹10000/- for attending Online MOOC Courses by NITTT.
- Ms. Sonika Dahiya received ₹600/- for attending FDP on “Advanced Pedagogical Techniques” at Ramanujan College.
- Ms. Sonika Dahiya received ₹1000/- for attending refresher course on “Research Methodology Techniques” at Devi Ahilya University, Indore.
- Ms. Minni Jain received ₹1000/- for attending refresher course on “Research Methodology Techniques” at Devi Ahilya University, Indore.

Participation in Professional Development Programmes by our Faculties

- Dr. Abhilasha Sharma attended Seminar on Next generation Security and Analytics for Mobile Assisted Remote Healthcare N-Samarth Webinar organised by DTU and Samsung R&D.
- Dr. Akshi Kumar attended FDP on Information Security in the Era of Deep Learning: Challenges & Opportunities organised by DTU.
- Dr. Akshi Kumar attended FDP on Human Centre Computing organised by AICTE Training and Learning (ATAL) Academy.
- Dr. Akshi Kumar attended Seminar on Next generation Security and Analytics for Mobile Assisted Remote Healthcare N-SAMARTH Webinar organised by DTU and Samsung R&D.
- Prof. Anil Singh Parihar attended FDP on Neural Networks and CNN organised by NITTTTR, Chandigarh.
- Prof. Anil Singh Parihar attended FDP on Data Science organised by AICTE Training and Learning (ATAL) Academy.
- Prof. Anil Singh Parihar attended FDP on TEQIP-III Short Term Course on Cyber Security and Modern Cryptography organised by IIT Kharagpur.
- Prof. Anil Singh Parihar attended Faculty Training Program on Machine Learning Techniques for Social Media Analysis Under ISEA Project Phase-II organised by IIT Guwahati.
- Dr. Aruna Bhat attended Seminar on Next generation Security and Analytics for Mobile Assisted Remote Healthcare N-SAMARTH Webinar organised by DTU and Samsung R&D.
- Dr. Aruna Bhat attended FDP on AICTE sponsored STC on "Blockchain: Business Foundation and Solution Architecture" organised by IIT Indore.
- Dr. Divyashikha Sethia attended FDP on Machine Learning and Computer Vision: Applications, Research Challenges organised by NIT Silchar.
- Dr. Pawan Singh Mehra attended Seminar on Next generation Security and Analytics for Mobile Assisted Remote Healthcare N-Samarth Webinar organised by DTU and Samsung R&D.
- Dr. Pawan Singh Mehra attended Seminar on Information Security in the Era of Deep Learning: Challenges & Opportunities organised by DTU.
- Dr. Pawan Singh Mehra attended FDP on Cyber Security and Forensic organised by NIT Jalandhar.
- Dr. Pawan Singh Mehra attended FDP on Enabling Technologies for Artificial Intelligence, Machine Learning and IOT organised by Aligarh Muslim University.
- Dr. Pawan Singh Mehra attended FDP on Introduction to Quantum Computing and Information organised by IIIT, Jabalpur.
- Dr. Pawan Singh Mehra attended Workshop on Virtual Labs organised by Delhi Technological University.
- Dr. Pawan Singh Mehra attended Seminar on Next Generation Security and Analytics for Mobile Assisted Remote Healthcare (N-SAMARTH) organised by Delhi Technological University.
- Dr. Prashant Giridhar Shambharkar attended FDP on Advanced Pedagogical Techniques organised by Ramanujan College, Delhi University
- Dr. Prashant Giridhar Shambharkar attended Conference/Symposium on International E- summit on Quality indices in higher education organised by DTU.

- Dr. Prashant Giridhar Shambharkar attended FDP on Data Science and Machine Learning organised by AICTE Training and Learning (ATAL) Academy, New Delhi and KIET Group of Institutions, Ghaziabad.
- Dr. Prashant Giridhar Shambharkar attended FDP on Refresher course in Research Methodology organised by HRDC, DAVV, Indore.
- Dr. Prashant Giridhar Shambharkar attended FDP on Short term training program on Information Security in the Era of deep learning organised by DTU.
- Dr. Prashant Giridhar Shambharkar attended Workshop on Virtual Labs organised by Delhi Technological University.
- Prof. Rahul Katarya attended FDP on Nascent Methodologies, Challenges and Realms of Research organised by DTU.
- Prof. Rahul Katarya attended FDP on Emotional Intelligence organised by AICTE Training & Learning (ATAL) Academy.
- Prof. Rahul Katarya attended FDP on Leadership & Excellence organised by AICTE Training & Learning (ATAL) Academy.
- Prof. Rahul Katarya attended Workshop on Blockchain Essentials for Educators organised by Grant Thornton India LLP and OXFORD University Press, Noida, India.
- Prof. Rahul Katarya attended FDP on Understanding Project Management Basics organised by Ministry of Human Resource Development, Government of India, Mechanical Engineering Department, National Institute of Technical Teachers Training and Research (NITTTR) Chandigarh.
- Prof. Rahul Katarya attended FDP on Outcome Based Curriculum Design organised by Ministry of Human Resource Development, Government of India, Mechanical Engineering Department, National Institute of Technical Teachers Training and Research (NITTTR) Chandigarh.
- Prof. Rahul Katarya attended FDP on Waste Management organised by Ministry of Human Resource Development, Government of India, Mechanical Engineering Department, National Institute of Technical Teachers Training and Research (NITTTR) Chandigarh.
- Prof. Rahul Katarya attended Workshop on Recent Trends in Domination in Graphs: Algorithms, Complexity and Applications (WRTDG 2020) organised by Department of Computer Science and Engineering in association with Centre for Continuing Education, National Institute of Technology, Warangal.
- Prof. Rahul Katarya attended FDP on Deep Learning & Applications organised by Electronics and ICT Academy, IIT Roorkee.
- Prof. Rahul Katarya attended FDP on Advanced Concepts for Developing MOOCS organised by Teaching Learning Centre, Ramanujan College, University of Delhi & sponsored by Government of India, Ministry of Human Resource Development, Pandit Madan Mohan Malaviya, National Mission on Teachers & Teaching.
- Dr. Rajeev Kumar attended FDP on Cyber Security and Forensic organised by NIT Jalandhar.
- Dr. Rajeev Kumar attended FDP on Research and Application Perspectives Artificial Intelligence and Machine

- Learning organised by Sridevi Women's Engineering College (SWEC) Hyderabad.
- Dr. Rajeev Kumar attended FDP on Machine Learning in Industrial revolution 4.0 organised by K.S.Rangasamy College of Technology, Tiruchengode, Tamilnadu
 - Dr. Rajeev Kumar attended Workshop on Fundamentals of Publishing in Top Journals organised by Maharaja Agrasen Institute of Management Studies (MAIMS).
 - Dr. Rajesh Kr. Yadav attended Workshop on Cyber Security & Networking organised by Advanced Level Telecom Training Centre (ALTTC), Apex Training Institute of BSNL, Ghaziabad.
 - Dr. Rajesh Kumar Yadav attended seminar on Next generation Security and Analytics for Mobile Assisted RemoTe Healthcare N-Samarth Webinar organised by DTU and Samsung R&D.
 - Dr. Rajesh Kumar Yadav attended FDP on Information Security in the Era of Deep Learning: Challenges & Opportunities organised by DTU.
 - Dr. Rohit Beniwal attended Refresher course on Research Methodology for Sciences organised by HRDC, DAVV, Indore.
 - Prof. Ruchika Malhotra attended FDP on Power Quality and Reactive Power Management organised by DTU.
 - Prof. Shailender Kumar attended Workshop on Artificial Intelligence and Machine Learning- A Project based Learning Approach organised by NITTTR, Chandigarh and Xtrans Solutions Pvt. Ltd., Bangalore.
 - Prof. Shailender Kumar attended FDP on Internet of Things (IoT) organised by NITTTR, Chandigarh.
 - Mr. Anurag Goel attended FDP on Research Aspects on Modern Analytics and Cyber Security organised by CSI, Ghaziabad Chapter and IIIT Noida.
 - Mr. Anurag Goel attended seminar on Next generation Security and Analytics for Mobile Assisted RemoTe Healthcare N-SAMARTH Webinar organised by DTU and Samsung R&D.
 - Mr. Anurag Goel attended Workshop on Recent Trends in Image Processing and Security organised by MITS, Gwalior
 - Mr. Anurag Goel attended Conference/ Symposium on Google Research India Graduate Symposium organised by Google Research India.
 - Mr. Anurag Goel attended FDP on IoT and Robotics organised by KIET Group of Institutions, Ghaziabad, U.P. (Online).
 - Mr. Anurag Goel attended FDP on Deep Learning for Natural Language Processing organised by Jaypee Institute of Information Technology, Noida, U.P. (Online).
 - Mr. Anurag Goel attended FDP on Artificial Intelligence for Computer Vision organised by IIT Roorkee (Online).
 - Mr. Kavinder Singh attended FDP on Data Science organised by AICTE Training and Learning (ATAL) Academy.
 - Mr. Kavinder Singh attended seminar on Information Security In The Era Of Deep Learning: Challenges & Opportunities organised by DTU.
 - Mr. Kavinder Singh attended Seminar on Next generation Security and Analytics for Mobile Assisted Remote Healthcare N-Samarth Webinar organised by DTU and Samsung R&D.
 - Mr. Rahul attended FDP on Advanced Pedagogical Techniques organised by Ramanujan College, Delhi University.

- Mr. Rahul attended Refresher course on Research Methodology for Sciences organised by HRDC, DAVV, Indore.
- Mr. Rahul attended seminar on Next generation Security and Analytics for Mobile Assisted RemoTe Healthcare N-Samarth Webinar organised by DTU and Samsung R&D.
- Dr. Sanjay Kumar attended seminar on Next generation Security and Analytics for Mobile Assisted RemoTe Healthcare N-Samarth Webinar organised by DTU and Samsung R&D.
- Dr. Sanjay Kumar attended Short term training program on Information Security in the Era of deep learning organised by DTU.
- Dr. Sanjay Kumar attended FDP on Advanced Pedagogical Techniques organised by Ramanujan College, Delhi University.
- Dr. Sanjay Kumar attended Refresher course in Research Methodology for Sciences organised by HRDC, DAVV, Indore.
- Dr. Sanjay Kumar attended FDP on Advanced Pedagogical Techniques organised by Ramanujan College, Delhi University.
- Mr. Kavinder Singh attended FDP on IoT and Robotics organised by KIET Group of Institutions, Ghaziabad, U.P. (Online).
- Ms. Minni Jain attended FDP on Advanced Pedagogical Techniques organised by Ramanujan College, Delhi University.
- Ms. Minni Jain attended Refresher course on Research Methodology for Sciences organised by HRDC, DAVV, Indore.
- Ms. Priya Singh attended seminar on Next generation Security and Analytics for Mobile Assisted RemoTe Healthcare N-Samarth Webinar organised by DTU and Samsung R&D.
- Ms. Priya Singh attended seminar on Information Security In The Era Of Deep Learning: Challenges & Opportunities organised by DTU
- Ms. Shweta Meena attended FDP on Data Science organised by AICTE Training and Learning (ATAL) Academy.
- Ms. Shweta Meena attended seminar on Information Security In The Era Of Deep Learning: Challenges & Opportunities organised by DTU.
- Ms. Shweta Meena attended webinar on Next generation Security and Analytics for Mobile Assisted RemoTe Healthcare N-Samarth organised by DTU and Samsung R&D.
- Ms. Sonika Dahiya attended FDP on Advanced Pedagogical Techniques organised by Ramanujan College, Delhi University.
- Ms. Sonika Dahiya attended Refresher course on Research Methodology for Sciences organised by HRDC, DAVV, Indore.
- Ms. Anukriti Kaushal attended Online Two - Week Refresher Course/Faculty Development Programme In Computer Science on the theme “Next Generation Technologies” organised by Ramanujan College, University of Delhi (online).

Faculty visit to other institutions for taking Experts' Lectures and other academic works

- Prof. Rajni Jindal delivered a Keynote address on Machine Learning Techniques at NIT Silchar on August, 2020.
- Prof. Rahul Katarya was Keynote Speaker for invited talk on “How Artificial Intelligence is Transforming the Health Industry?” in Flagship IEEE Virtual Meet-2020 being organized in IEEE week celebrating IEEE Day-2020 themed on an "STEMM (Science, Technology, Engineering, Mathematics & Medicine) Industry-Academia Meet-up 2020 organized by IEEE-AcSIR CSIO Student Branch, CSIR-CSIO, Chandigarh along with its affinity group IEEE WIE (Women in Engineering) & IEEE Nanotechnology Council (NTC) Student Branch Chapter on October 9, 2020 at 6 PM (IST).
- Prof. Rahul Katarya delivered an expert talk in BRICS-YSF Conclave 2020, Scientific session of Artificial Intelligence on “Opportunities and Challenges in Healthcare Analytics Using Artificial Intelligence (AI) in BRICS Countries” in virtual mode at SUSU (South Ural State University) 76, Lenin prospekt, Chelyabinsk, Russia, 454080 on 22 September 2020.
- Prof. Rahul Katarya was Keynote Speaker for title of “Health Care and Big Data” in TEQIP III Sponsored Five Days ONLINE Faculty Development Program On “Scalable Machine Learning on Big Data” organized by the Department of Computer Science and Engineering and Information Technology, Coimbatore Institute of Technology, Coimbatore, during 15th to 19th March, 2021.
- Prof. Rahul Katarya was Keynote Speaker for “Significance of Opinion Leader in Online Social Networks” 2020 6th IEEE International Conference on Parallel, Distributed and Grid Computing (PDGC), organized by Department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology, Wagnaghat, Solan, Himachal Pradesh, India, 6-8 November 2020.
- Prof. Anil Singh Parihar delivered an invited talk on “Digital Image Forensic” in December 2020 at IIIT Bhubaneswar.
- Prof. Anil Singh Parihar delivered an invited talk on “Machine Learning in Image Processing” in December 2020 at GIET University, Gunupur.
- Prof. Shailendra Kumar delivered a Keynote session on “Open Research Problems in Databases” in International Conference on Computational Intelligence and Communication Technologies (CCICT 2021) jointly organized by The Karkonosze State University of Applied Sciences in Jelenia Gora, Poland and BMIET Sonipat Haryana on 03 July 2021.
- Prof. Shailendra Kumar delivered a Keynote session on “Fake New Detection” in Databases in Third International Conference on Computational Intelligence (CICT 2020) organized by BMIET Sonipat Haryana on 29 June 2020.
- Dr. Akshi Kumar was Keynote Speaker for “Online Information Fabrication” during Faculty Development Program (FDP) on Research Trends in Social Network Analytics, Department of Computer Science & Engineering, SCMS School of Engineering & Technology, Karukutty, Kerala, 24th to 28th May 2021

- Dr. Aruna Bhat delivered a Keynote talk on Windows OS Security in 2nd Short Term Course in Cyber Security organised by HRDC JNU.
- Dr. Pawan Singh Mehra delivered an invited talk on “Programming and Security” in January 2021 at Galgotias College of Engineering and Technology, Greater Noida

Teachers receiving awards, recognition and fellowships from Government bodies Commendable Research Award was awarded to:

- Prof. Rajni Jindal
- Prof. Ruchika Malhotra
- Prof. Rahul Katarya
- Dr. Akshi Kumar
- Dr. R.K.Yadav
- Dr. Prashant Giridhar Shambharkar
- Dr. Sanjay Kumar
- Ms. Sonika Dahiya
- Dr. Geetanjali Garg

Grants for research sponsored by government organization

- Prof. Rahul Kataraya fetched project of ₹12,51,000 from Department of Science and Technology for “TRIP AID-Travel Risk Information in a Pandemic using Artificial Intelligence Development”.

Functional MoUs with Institutions of National, International Importance, Other Universities, etc.

- MoU was signed between DTU and Samsung in 2019 for a period of 3 years.
- MoU between Media and Data Science Research Lab, Adobe Inc. (principal place California USA) and DTU (Machine Learning Research Lab, Dept. CSE, Faculty Incharge Prof. Anil Singh Parihar). It will provide an excellent opportunity for the students of DTU to work on the industry-relevant problems in the area of computer vision, NLP, and Deep Learning under joint mentorship.

Linkages with Institutions/ Industries for Internship, On-the-Job Training, Project Work, Sharing of Research Facilities

- MoU with Samsung Research India from 2019 for a period of 2 years for Lab Setup. Dr. Rajni Jindal, Dr. Divyashikha Sethia, Ms. Minni Jain participated in the linkage.
- MOU between Media and Data Science Research Lab, Adobe Inc. (principal place California USA) and DTU (Machine Learning Research Lab, Dept. CSE, Faculty Incharge Prof. Anil Singh Parihar). It will provide an excellent opportunity for the students of DTU to work on the industry-relevant problems in the area of computer vision, NLP, and Deep Learning under joint mentorship.

4.7 Department of Design

Prof. Ranganath M. Singari, HoD



ACADEMIC PROGRAMMES

- Bachelor of Design (B.Des.)
Intake: 98+9
Students Admitted: 83
- Ph.D. Research Scholar: 4

LABORATORIES

- Product Design Studio
- Interaction Design Studio
- Fashion Design Studio
- Photography and Videography Studio
- Computer Graphics Studio
- Visual Communication Studio
- Centre for Industrial Design and Ergonomics
- Multiple Activity Hall
- Conference Hall
- Design Workshop
- Open Air Theatre
- Knowledge Resource Centre
- BOS Meeting Hall
- VIP Room
- Medical Facility Room
- Kitchen with Tea and Coffee facility
- Store Room
- Maintained Clean rooms and Drinking Water Facilities
- Open Class room facilities inside and outside the Building

SALIENT FEATURES

Strategic role of design through innovation in enhancing national and industrial competitiveness is universally recognized and underpins the national policy of Govt. of India. The strategy to achieve this vision seeks spotlight on strengthening quality design education and usages of design in different sectors.

In furtherance of this national design vision, Delhi Technology University had decided to provide facilities for excellent design education, research and training to suit the needs of the society.

The Department of Design is envisioned to pursue excellence in design thinking, design scholarship and design practice for the betterment of society in a holistic manner.

Design is viewed as a driver of innovation and is recognized as a key differentiator for providing competitive edge to products and services. It involves an integrated humanistic approach to design products, service and system. It seeks to delve deeper in understanding of technological, Commercial and societal context in connection.

Development and delivery of innovatives products and services as well as tools, techniques and methods required in the practice of design suitable to the environment.

ACHIEVEMENTS

- Journal Publications 1



ACADEMIC STAFF

Professors: 02

- **Prof. Ranganath M. Singari (Head)**, BE, ME, DMS, Ph.D. Areas of Interests are CAD/CAM, Product Design, Industrial Engineering, Innovative Design, Physical and Cognitive Ergonomics.
- **Prof. Lalit Kumar Das**, (Honorary Distinguished Faculty), MA (Industrial Design), M.Tech., B.Tech. Areas of Interest are Industrial Design Education, Product Design, CAD, Sustainability, etc.

DESIGN EDUCATORS: 02

- **Prof. S.G Ranjan**, Post Graduate in Printmaking. Areas of Interest are Art and Design.
- **Prof. Arunotpal Thakur**, Post Graduate in Fashion Management Studies, MBA. Areas of Interest are Design Thinking, Design Management, Fashion Design & Retail.

ASSISTANT PROFESSORS: 05

- **Dr. Ravindra Singh**, B.Tech., M.Des., Ph.D. Areas of interests are Universal Design, Product Design, Human Centric Design, etc.
- **Mr. Neeraj Rathee**, BFA, MFA, PhD (Pursuing). Areas of interests are Visual Communication, Graphic Design, Animation and Design Research
- **Mr. Partha Pratim Das**, B.Tech., M.Tech., M.Des, PhD(Pursuing). Areas of interests are UI/UX, Design Thinking, Ethnographic Research, etc.
- **Mr. Varun Singh**, B.Arch, M.Arch. Area of interest is Visual Design.
- **Ms. Taruna Singh**, B.Des., M.Des. Ph.D. (Pursuing) Areas of interests are Accessory Design, Product, Design & Development, Craft Innovation & Design Research



Achievements of the Department:

- Successfully conducted a 4 Week Internship program on Storytelling techniques organized by the Department of Design in June, 2021. Four experts from industry have delivered expert lectures and workshop sessions on Basics of Animation, Comic design, Picture book, Movie making.
- Successfully conducted a 6 Week Internship program on Automotive and transportation design organized by the Department of Design in June, 2021. Experts from industry took training and hands on sessions related to the theme.
- Prof. Ranganath M. Singari received Research Excellence Award 2020 at 4th research excellence awards DTU.
- Dr. Ravindra Singh received the Research Excellence Award 2020.
- Dr. Ravindra Singh received Global Teaching Excellence Award 2021.
- Successfully organised an expert lecture on Physical Ergonomics by Prof. Dhurjati Majumdar, DRDO.
- Successfully organised an expert lecture on Packaging Design by Prof. Sumer Singh IIT Delhi.
- Successfully conducted expert lecture on Design Management by Prof. Arunotpal Thakur.
- Successfully conducted webinar on Adobe applications by Industry representatives, online

Participations in Professional Development Programmes by our Faculties:

- Dr. Ravindra Singh, attended Advance Pedagogical Techniques 1 week FDP
- Dr. Ravindra Singh participated in 4-Week Induction/Orientation Programme for "Faculty in Universities/Colleges/ Institutes of Higher Education".

- Dr. Ravindra Singh attended online Faculty Development Program, Outcome Based Engineering Education and Accreditation (OBAMA 2020).
- Dr. Ravindra Singh attended Online Faculty Development Programme "Launching Basic Entrepreneurship Course on Campus".
- Dr. Ravindra Singh attended "Two-Week Refresher Course In "Mathematics" organized by "Department of Mathematics, Ramanujan College".
- Ms. Taruna Singh Participated in Training program on "Online Teaching Classes, Organized by HRDC.
- Ms. Taruna Singh participated in FDP of one week organized by Indian institute of Technology, Guwahati on Ergonomics in the era of Industry 4.0.
- Ms. Taruna Singh participated in a 2-week online patent course by Turnip.
- Ms. Taruna Singh participated in One day workshop on India patents Act, 1970.
- Ms. Taruna Singh participated in a 2-week comprehensive online patent information course.
- Ms. Taruna Singh participated in a 4 Week induction/orientation programme for faculty in Universities/ colleges/ Institutes of Higher Education, Organized by Teaching learning center, Ramanujan College University of Delhi.
- Mr. Neeraj Rathee attended COMIN, International Conference on Indian Comics, Department of Design, IIT Delhi, 2020, Online <https://www.comin20.com/>
- Mr. Neeraj Rathee attended TEQIP, Dec 1-3 IITD, Online TEQIP III Course on Industrial Design Innovation and Entrepreneurship, Online.
- Mr. Neeraj Rathee attended a Conference For Design Leadership Summit 2020, Online.
- Mr. Neeraj Rathee attended 3rd Annual Indian Art and Design Educators

Association's (IADEA) Conference, 2020 (5-7 Nov. 2020), Online.

- Mr. Neeraj Rathee attended Design Open: ED : Future of Creative Education, in partnership with P-R-E, Cumulus Association and IxDA Kolkata, Online, 23th September.
- Mr. Neeraj Rathee attended an online webinar session on Skills to become a digital/visual storyteller, Friday, 18th September.
- Mr. Neeraj Rathee attended online webinar session on Animation Basics with Dapoon, Wednesday, 16th September.
- Mr. Neeraj Rathee attended online workshop session on Make Art With Saajan: A Digital Art Webinar | Powered by Wacom, Friday, 28th August, 2020.
- Mr. Neeraj Rathee attended a Panel Expert session on Open science and the reward system: how can they be aligned? <https://www.elsevier.com/about/open-science><https://www.elsevier.com/about/open-science>
- Mr. Neeraj Rathee attended Better Worlds, a symposium on 12th December, 2020 (Online).
- Mr. Neeraj Rathee completed successfully MOOCS one week Faculty Development Program on "Advanced Pedagogical Techniques" "Advanced Pedagogical Techniques" from 29th October - 5th November, 2020 with A+ grade.
- Mr. Neeraj Rathee participated in the Online Faculty Development Program, Outcome Based Engineering Education and Accreditation (OBEEA 2020), sponsored by TEQIP-III, organized by NIT Meghalaya during 21st-23rd September, 2020.
- Mr. Neeraj Rathee attended a session on Best Practices in Submitting Research for Highly Selective Journals- Dr. Robert

D. Eagling, Editor-in-Chief of Chem (Cell Press hoursal) on December 3, 2020.

Faculty Visit to Other Institutions for Taking Experts' Lectures and Other Academic Works:

- Prof. Ranganath M. Singari delivered expert talk (online).
- Dr. Ravindra Singh delivered an Expert Talk on Universal Design and Practice in UP Institute of Design, Noida.
- Dr. Ravindra Singh delivered an Expert Talk on Various frameworks of Universal Design, SPA Delhi (Online).

Details of Professional Developments, Conferences, Seminars, Etc. Organised by the Department:

- Dr. Ravindra Singh, Coordinator of 6 WIP 2021 "Intelligent Automotive Design" conducted by the DoD.
- Dr. Ravindra Singh conducted a one-day workshop on business planning during March 20th, 2021.
- Dr. Ravindra Singh delivered Expert lecture on Design methods and Processes.
- Mr. Neeraj Rathee, coordinated, one-day workshop on business planning during 20th March, 2021.
- Mr. Neeraj Rathee, coordinated, 4 Week Internship program/ workshop on Storytelling techniques organized by Department of Design in June, 2021. Facilitated External experts for taking sessions on Basics of Animation, Comic design, Picture book, Movie making.

STUDENT'S ACHIEVEMENTS:

- Akshita Mishra, Raghav, Aakash, Ipshita and Arnav Gupta, Student Service Design Challenge 2021 Winner.
- Aditya Bansal and Yamini Gupta, UXplorer Winner (Silver).
- Jhonty Dhol, 2k21/bd/047 achieved

India Book of Record for making smallest world map on wooden piece and Asia Book of Record for making smallest ICC world cup in the Asia with Grand Master title.

- Yamini Gupta Microsoft Student Design Challenge got Winning Entry.
- Akshita Mishra, Ipshita Singh, Akash Seth, Raghav Byala, Arnav Gupta Philips Service Design Challenge got Winning Entry.
- Yamini Gupta and Aditya Bansal UXplorer '21 got 2nd Position.
- Yamini Gupta and Aditya Bansal Salesforce Design Challenge got Winning Entry.
- Anirudh Kundu HCI International Conference 2021 (Washington DC, USA) Paper Selected.
- STAIP Akash Seth, Ipshita Singh, Tejasv Mohan Lufta, Shreya Saboo, Pravalika Deewar - Rendezvous'19 got First Position.
- Team SAR Sahil R and Anirudh Kundu + Raghav Byala UMO Design X Social Global Innovation Challenge 2020 Finalists (Best in Academia).
- Team SAR Anirudh Kundu, Sahil R and Raghav Byala D'Source Corona Design Challenge IIT Bombay Winner Open Category (Phase 2).
- Anirudh, Raghav and Sahil R James Dyson Award Featured.
- Team SAR Anirudh Kundu, Sahil R and Raghav Byala 3M CII Young Innovators Challenge 2020 Semi Finalists (Awaiting Final Result).
- Team Pankh Anirudh Kundu and Sahil R UPID NOIDA All India Design Hackathon Special Mentions (Product Innovation Category).
- 1Onyx Naman, Nipun, Akash IIITD Design 360 Finalist.
- Akshita Mishra D'source Corona Design

Challenge (Communication Design) Winning entry.

- Sahil R. Mood Indigo - Cursor Strokes (Mascot Designing Competition) First.
- Sahil R Freepublikan Awards (2020) Winner.
- Raghav Byala Essex Dox Fest, Lift- Off Sessions June, 2020.
- Animated Short Film emerged as an Official Selection, final results pending.
- Theal Arnav, Snehal and Anshita UXplorer Awards 2020 Bronze Winner.
- Arth Arnav and Anirudh James Dyson Award Fatured on Website.
- Naman, Dhruvi, Saoumya and Vibhor D'source Corona Design Challenge (Communication Design) Winning Entry.
- Vibhor Agarwal and Dhruvi jhanji PortBlair International Film Festival Winning Entry - Best stop motion.
- Khoj Dhruvi jhanji and Saoumya Mandhar Toycathon 2021 Finalist- Physical toy Category.
- Naman, Dhruvi, Saoumya and Vibhor D'source Corona Design Challenge (Game Design) Winning Entry.

EXTENSION AND OUTREACH ACTIVITIES:

- Dr. Ravindra Singh, Coordinator of 6 WIP 2021 "Intelligent Automotive Design" conducted by the DoD.
- Mr. Neeraj Rathee was Coordinator for 4 Week Internship program/ workshop on Storytelling techniques organized by Department of Design in June 2021. Facilitated External experts for taking sessions on Basics of Animation, Comic design, Picture book, Movie making. Undergraduate and postgraduate students of other universities and students of 11th & 12th schools as well as students of DTU (other departments) attended the workshop.

4.8 Delhi School of Management

Dr. Archana Singh, HoD



ACADEMIC PROGRAMMES

- MBA
Intake: 150
Students Admitted: 166*
- MBA (Executive)
Intake: 75
Students Admitted: 37
- PhD Research Scholars admitted: 15
*(Including international students)

FACILITIES

Delhi School of Management has access to a wide array of world class facilities that include fully equipped Computer Centre, a chain of scientifically advanced Research Laboratories, Smart Classrooms with State-of-the-Art audio and video support, a fully Centralized Library with a plethora of available volumes, an Auditorium with a capacity of over a thousand, an Open-Air Theatre, and a fully developed Sports Centre.

SALIENT FEATURES

Delhi School of Management (DSM) was established in 2009 with Delhi College of Engineering (DCE) acquiring University status, being officially renamed as Delhi Technological University (DTU) through a legislature passed by the Delhi State Assembly. DSM envisages at developing distinctive future managers, keeping up with the tradition of DCE (and now DTU) by providing excellent world class education. DSM was established with vision of inculcating penchant for innovation, research, and experimentation in the aspiring managers. DSM aims at extending the seven-decade long legacy of DCE by incubating and developing techno-managers, who are adept at identifying pertinent and critical business problems and apply their technical skills and competencies in solving those issues. In order to train its students to face the challenges of an information and knowledge driven work environment, DSM provides them with the Triple E: Education, Experience and Exposure. DSM strives to inculcate its students the managerial competence through specialized knowledge and skills, while simultaneously empowering their minds through quality teaching, consultancy, and other professional services in order to fulfil its role of a vibrant and model institution capable of imparting quality education in the area of Management Studies. DSM envisions at developing a knowledge society by providing equitable access to the masses and broadening the span of their participation in the areas of higher education

ACHIEVEMENTS

- | | |
|---------------------------|----|
| • Journal Publications | 29 |
| • Conference Publications | 1 |



ACADEMIC STAFF

Professors: 03

- **Prof. P K Suri**, M.Sc (DU), M.Tech (IIT-Delhi), Ph.D (IIT-Delhi), Areas of interest are E-Governance, IT Management, Business Analytics
- **Prof. Rajan Yadav**, MBA, Ph.D., Areas of interest are Services Marketing, Sales and Distribution
- **Honorary Prof. G C Maheshwari**, Ph.D., Areas of interest are Finance, Accounting and Strategy

Associate Professors: 03

- **Dr. Archana Singh (HOD)**, MBA (Finance), Ph.D., Areas of interest are Corporate Finance, Financial Accounting, Security Analysis
- **Dr. Shikha N Khera**, MBA, NET, PhD, Areas of interest are Organizational Behavior, Organizational Development.
- **Dr. Saurabh Agarwal**, B.E. (UOR, Roorkee), M. Tech. (IIT, Delhi), MBA (OSU, USA), PhD (DTU, Delhi), Areas of interest are Supply Chain Management, Reverse Logistics, Industrial Engineering, Data Analytics.

Assistant Professors: 10

- **Dr. Vikas Gupta (on lien as Associate Professor to USME)**, MBA, NET, PhD Areas of interest are Knowledge Management, Innovation Management, Business Process Re-engineering, CSR
- **Dr. Meha Joshi**, MBA, NET, Ph.D. Areas of interest are Organizational Development, Customer Relationship Management, Talent Management
- **Dr. Sonal Thukral**, M.Com., MBA, NET-JRF, PhD, Areas of interest are Finance, International Business
- **Ms. Deepali Malhotra**, M.Com., M.Phil, NET-JRF, Ph.D., Areas of interest are Strategy Management, International Business, Finance
- **Dr. Deep Shree**, MBA, NET-JRF, Ph.D., Areas of interest are Marketing, Not for Profit Marketing, Brand Management, Qualitative Research.
- **Mr. Yashdeep Singh**, B.E., MBA, NET, Pursuing PhD, Areas of interest are Marketing Management, Information Technology Management.
- **Mr. Mohit Beniwal**, B.Tech, MBA, Pursuing PhD, Areas of interest are General Management, Information Systems.
- **Mr. Chandan Sharma**, B.Tech. PGDM, Pursuing PhD. Areas of interest are Finance, Strategy.
- **Mr. Dhiraj Kumar Pal**, B.E, PGDM, Pursuing PhD, Areas of interest are Marketing, Operations & SCM, Strategy
- **Dr. Abhinav Chaudhray (contractual)**, BE, MBA, NET, Ph.D. Areas of interest are Production and Operations Management, Business System Analysis and Design, International Marketing

Achievements of the Department

- Organized One-week Online FDP titled "Sustainable development: Implications for Management research and practice" on from 1st-5th December 2020.
- Average Publications in Journals, conference proceedings, books/book chapters are more than 2 per faculty.
- Provided Consultancy services to reputed institutions such as National Institute of Electronics and Information Technology (NIELIT).
- Organized Lecture Webinar Series on the theme "New frontiers of Management" from 31 July – 30 September 2021.
- Development of E-content on platforms such as E-gyankosh.
- Organized several co-curricular activities such as Ahaan'20, Rang-e-deepawali, Umang Utsav Tritaya, Pariprekshya 4.0, Article writing competition, The debate league, BMC workshop, Rang-de-DSM, Entheos 4.0, DSM Premier League, E-Workshop on Angel Investment/VC Funding Opportunity.

Teachers provided with financial support to attend Conferences, Seminars, etc.

- Dr. Deepali Malhotra was extended a support of ₹ 2000 to attend 3rd ICDE and 14th Annual ISDSI Conference, IIM Raipur, 27th - 29th December, 2020

Faculty Visits to Institutions for other Academic Work

- Prof. P K Suri delivered online lecture on “National E-governance Initiatives in the Area of Agricultural Marketing” for Human Resource Development Centre, Kurukshetra University.
- Prof. P K Suri delivered online lecture to Officers of Central Electricity Authority on “E-Governance Implementation: Best Practices with Special Reference to Citizens’ Charter” for National Power Training Institute, Faridabad.
- Prof. P K Suri delivered online lecture on "Technology as an Enabler: Leveraging Technology for achieving Efficiency and Transparency - Insights from a few Government Projects " for Manganese Ore India Limited (MOIL), Nagpur.
- Prof. P K Suri extended research and MBA project evaluation support to Deptt. of Management studies, IIT Delhi.
- Dr. Archana Singh was the SRC Expert in JIMS and NSUT.
- Dr. Sonal Thukral gave a Lecture at Guru Gobind Singh College of commerce, DU, on 31st October, 2020.
- Dr. Sonal Thukral visited FICCI Global Youth Entrepreneurship & Industry Connect as a faculty expert.

Participation in Professional Development Programs by our Faculties.

- Dr. Archana Singh attended Online Certificate Program on “Advanced Research Methodology and data Analysis”, organised by ASBM University school of Business, Bhubaneswar.
- Dr. Archana Singh attended “Online 3rd Summer School on Behavioural Finance”, organized by IIIT Allahabad.
- Dr. Archana Singh attended 7 Days FDP on "Time Series and Panel Data

Analysis”, organized by Ramanujan College University of Delhi.

- Dr. Archana Singh attended "Pedagogical practices of New India under National Education Policy 2020", Jointly organised by Tripura University, Manipur University and Assam University.
- Dr. Archana Singh attended “Beyond the Boundaries: Re-Inventing Higher Education Paradigm” organized by USMS, GGSIPU, Delhi.
- Dr. Archana Singh attended " Online workshop on Qualitative research" organized by Virtual center for academic research and excellence Pvt. Ltd.
- Dr. Sonal Thukral attended online workshop “Qualitative data analysis using NVIVO software” organized by DEEDS, India.
- Dr. Sonal Thukral attended “BIMTECH Case Master Development Workshop”, organized by BIMTECH.
- Dr. Sonal Thukral attended “Ethics and Values in Technical Education in Context of National Education Policy 2020” organized by Centre for Value Based Education, Delhi Technological University.
- Dr. Sonal Thukral attended AICTE Sponsored Short Term Training Programme on "Financial Modelling (Phase III)" organized by MediCaps University, Indore.
- Dr. Sonal Thukral attended 4th Summer School on "Behavioural Finance” organized by Indian Institute of Information Technology (IIIT)-Allahabad.
- Dr. Saurabh Agrawal attended E-workshop on "Bioinformatics” organized by Department of Biotechnology, DTU.
- Dr. Saurabh Agrawal attended “One-week eFDP on “Beyond the Boundaries:

- Re-Inventing Higher Education Paradigm” organized by GGSIP, DU.
- Dr. Saurabh Agrawal attended “One week online STTP on “Advances in manufacturing systems” organized by MITS Gwalior.
 - Dr. Saurabh Agrawal attended “One week FDP on “Role of renewable energy sources in Indian energy security” organized by DTU.
 - Dr. Deep Shree attended FDP on “Qualitative Data Analysis using Nvivo” organised by Meerashpa Learning Soutions.
 - Dr. Deep Shree attended FDP on “Demystifying Literature Review Techniques” organised by Koach Scholar.
 - Dr. Deep Shree attended FDP on “Case Study Writing, Analysis and Teaching” organised by Koach Scholar.
 - Dr. Deep Shree attended FDP on “Advanced Functionality of Mendeley” organised by Nuhianwali Education Society.
 - Dr. Deep Shree attended FDP on “Academic Ethics – Plagiarism” organised by APTI.
 - Ms. Deepali Malhotra attended “Online 4th Summer School on Behavioural Finance”, organized by IIT Allahabad.
 - Ms. Deepali Malhotra attended “Art of Thesis Writing and Academic Publishing”, organized by Koach Scholar
 - Ms. Deepali Malhotra attended FDP on “Advanced Time series analysis”, organized by VSSR Global.
 - Mr. Yashdeep Singh attended five-day innovation series on Patent Search and Filing conducted by Turnip innovations and Andhra University.
 - Mr. Chandan Sharma attended FDP on “Inculcating Universal Human Values in Technical Education” organised by All India Council for Technical education.
 - Mr. Chandan Sharma attended FDP on “Art of Thesis Writing and Academic Publishing” organised by Koach Scholar.
 - Mr. Chandan Sharma attended FDP on “Nascent Methodologies, Challenges and Realms of Research” organised by Delhi Technological University.
 - Mr. Dhiraj Kumar Pal attended TEQIP III Sponsored One Week Webinar / Online F.D.P on “Digital Manufacturing” organized by Punjab Engineering College.
 - Mr. Dhiraj Kumar Pal attended ATAL Academy online FDP on “Management of Intellectual Property (IP) and Innovation (Creation, Protection and Leveraging of IP)” organized by National Institute of Industrial Engineering.
 - Mr. Dhiraj Kumar Pal attended ATAL Academy online FDP on “Technology Management” organized by Jagan Institute of Management Studies.
 - Mr. Dhiraj Kumar Pal attended One-Week Online FDP on “Leadership Mastery Through Self-Management” organized by Centre for Value Based Education, DTU & Heartfulness Education Trust.
 - Mr. Dhiraj Kumar Pal attended One Week Faculty Development Programme cum Workshop on “Data Analytics using R” organized by Department of Management (MBA), MAIT, Delhi.
 - Mr. Dhiraj Kumar Pal attended ATAL Academy online FDP on Business Analytics Using Python for Food & Agriculture Sector” organized by Indian Institute of Plantation Management Bengaluru.

4.9 Department of Electronics and Communication Engineering

Prof. N. S. Raghava, HoD



ACADEMIC PROGRAMMES

- B. Tech. (Electronics and Communication Engineering)
Intake: 232
Students Admitted: 232
- B. Tech. (Electronics and Communication Engineering) (Continue Education)
Intake: 60
Students Admitted: 11
- M. Tech. (Microwave and Optical Communication Engineering)
Intake: 24+5
Students Admitted: 09
- M. Tech. (Signal Processing and Digital System Design)
Intake: 24+5
Students Admitted: 14+01 (SPN)
- M. Tech. (VLSI Design and Embedded System)
Intake: 25+5
Students Admitted: 26
- Ph.D. Research Scholars: 29

ACHIEVEMENTS

- | | |
|---------------------------|----|
| • Journal Publications | 61 |
| • Conference Publications | 53 |
| • Book Chapters | 19 |

SALIENT FEATURES

The Department of Electronics and Communication Engineering has seen considerable growth since its inception in 1976. The vision of the department is to focus on the incubation of innovations in the areas of electronic design/ fabrication, and communication technologies, which are needed to address the growing challenges of tomorrow. The overall aim is to harbour a sustainable, and continuously evolving scientific, technological and educational environment which is both internationally-adapted and industry-relevant. This department offers UG/ PG and Ph. D. programmes. Currently, the department has an annual intake of 190 students in the B.Tech programme in Electronics and Communication Engineering. The department is also offering B.Tech (Evening) with an intake of 45 students. Project and Industrial Training is an integral part of the curriculum and are carried out in frontal areas of technology. Currently the Department has 11 well equipped curriculum laboratories and 4 research laboratories. There are separate departmental project laboratories. New equipment and experimentation work leading to perfect understanding of curriculum in electronics and communication engineering lays greater

SALIENT FEATURES (continue...)

emphasis on deep understanding of fundamental principles and state of art knowledge. The PG programs include M. Tech. in VLSI Design and Embedded Systems; Signal Processing and Digital Design; and Microwave and Optical Communication and. The Department has focused attention on quality research. Scholarships are available for Ph. D. programs in the area of Electronics and Communication namely VLSI, DSP, Image Processing, Micro strip antenna design, Sensor Networks, Analog and digital system design.

Faculty members of the department have been regularly contributing towards International and National Journals of repute from publishers like IEEE Transactions, IET, Wiley, Springer and Elsevier, etc. along with Proceedings of National and International Conferences. The department is also active involved in professional activities undertaken by IEEE Delhi chapters. Several popular technical books and chapters have been authored by the faculty members of the department. Some faculty members have applied for patent for their research findings. The Department of Electronics and Communication Engineering at Delhi Technological University has developed into one of the best departments of the University. The placement trend has shown that the students of the department have been successful in getting lucrative jobs based on their interests in different fields. Top global recruiters such as Texas Instruments, Synopsis, Sandisk, Qualcomm, ARM, Freescale, ST Microelectronics, TCS digital india, Samsung, Wipro, Mentor Graphics, Airtel, BEL, CDOT, TRAI, TCIL and Wynnk have offered placements to the students of this department with a package of over ₹ 16 Lakhs per annum. Other recruiters from allied sectors have recruited students from this department with attractive packages. This consistent placement record illustrates the commitment and contribution of this department to the success story of the University. The graduates of the department are occupying important positions in both government as well as corporate sector with many of them having joined programs of higher studies in India and abroad.

The Department regularly organizes seminars, workshops and training programs to keep pace with the new developments and recent trends in relevant technologies. Recently the department has organized invited lecture series in VLSI and Microwave engineering to augment industrial inputs. The department has hosted the MHRD sponsored GIAN course in the University which was delivered by Prof. Mohammad Sawan, Fellow of the Canadian Academy of Engineering, Fellow of the Engineering Institutes of Canada, Fellow of the IEEE Fellow IEEE and Professor of Microelectronics and Biomedical Engineering, Polytechnique Montréal, Canada. Apart from these activities the students are encouraged to organize and participate in various technical and social activities under the aegis of IEEE student branch and Robotics society. Technical fests are organized under the IEEE student branch (TROIKA) and Robotics society respectively. They are also encouraged to participate in various group learning and discussion activities in addition to presentation of seminar and term paper presentations on individual basis.



ACADEMIC STAFF

Professors: 13

- **Prof. N. S. Raghava (HOD)**, Ph.D, Areas of Interest are Antenna and Propagation, Microwave Engineering.
- **Prof. Asok De**, Ph.D, Areas of Interest are Communication System, Microwave.
- **Prof. Rajiv Kapoor**, Ph.D, Areas of Interest are Machine learning, Computer Vision.
- **Prof. OP Verma**, PhD, Areas of Interest are Image Processing, Signal Processing, Soft Computing, Artificial Intelligence.
- **Prof. S. Indu**, Ph.D, Areas of Interest are Computer Vision, image processing.
- **Prof. Rajeshwari Pandey**, Ph.D, Areas of Interest are Analog Integrated circuits, Microelectronics.
- **Prof. Neeta Pandey**, Ph.D, Areas of Interest are Analog and Digital VLSI Design, Current mode ADC Design.
- **Prof. J Panda**, Ph.D, Areas of Interest are Digital Signal Processing, Computer Vision, Digital System Design.
- **Prof. Dinesh Kumar**, Ph.D, Areas of Interest are Image processing, Clustering.
- **Prof. Rajesh Rohilla**, Ph.D, Areas of Interest are Computer Vision, Machine Learning, Embedded Systems, Robotics.
- **Prof. M. S. Choudhary**, Ph.D, Areas of Interest are Bio-Medical Signal, Image Processing.
- **Prof. Gurjit Kaur**, Ph.D., Areas of Interest are Optical Communication, Wireless Communication, IOT.
- **Prof. Poornima Mittal**, Ph.D., Areas of Interest are Organic Electronics, VLSI Design, Device Modeling.

Associate Professors: 03

- **Mr. Rajesh Birok**, M.Tech, Areas of Interest are Bio-Medical Instrumentation.
- **Dr. Alok Kumar Singh**, Ph.D, Areas of Interest are Analog Integrated Circuits and Signal Processing, Analog Devices.
- **Dr. Priyanka Jain**, Ph.D, Areas of Interest are Microwave Engineering, Digital Signal Processing.

Assistant Professors: 31

- **Dr. Deva Nand**, Ph.D, Areas of Interest are Analog circuit Designing, Digital System Designing.
- **Mr. Avinash Ratre**, BE, M.Tech., Areas of Interest are Signal, Image, Video Processing, Computer Vision, Machine Learning, Pattern Recognition, Digital Communication.
- **Mr. Ajai kumar Gautam**, M.E (ECE), Areas of Interest are Image processing, Digital Design, Embedded systems.
- **Dr. N Jayanthi**, Ph.D, Areas of Interest is Image Processing.
- **Dr. Sudipta Mazumdar**, Ph.D, Areas of Interest is Signal Processing.
- **Dr. Malti Bansal**, Ph.D, Areas of Interest is Wireless Sensor Networks.
- **Dr. Yashna Sharma**, Ph.D, Areas of Interest are Nanophotonics, Optical Communication, Sensors.
- **Mr. Anurag Chauhan**, M.Tech., Ph.D. (Pursuing), Areas of Interest are VLSI, Nanomaterials, spintronics.
- **Mr. Piyush Tewari**, M.Tech., Ph.D (Pursuing), Areas of Interest are Signal Processing, Wireless Communication and Machine Learning.
- **Ms. Kriti Suneja**, Ph.D. (Pursuing), M.Tech, Areas of Interest are Digital System Design, Speech Processing, VLSI, Testing of digital systems.
- **Mr. Sumit Kumar Khandelwal**, M.Tech, Ph.D. (Pursuing), Areas of Interest are Microwave Engineering, Advanced Semiconductor Devices.
- **Mr. Pankaj Dahiya**, Ph.D (Submitted), Areas of Interest is Instrumentation and Control.
- **Dr. Rohit Kumar**, Ph.D, Postdoc, Areas of Interest are Wireless Communication, Reinforcement Learning for Cognitive Radio and IoT Networks, Block chain and Distributed Computing.
- **Mr. Sachin Dhariwal**, M.Tech, Area of Interest is Advanced Semiconductor Electronics.
- **Mr. Akshay Mann**, M.Tech., Area of Interest is Microelectronics.
- **Mr. Lokesh Gautam**, M.Tech, Areas of Interest are Digital and Analog VLSI Design, Digital Circuits and Systems Design. Low power VLSI.
- **Mr. Rahul Thakur**, M.Tech., Ph.D. (Pursuing), Areas of Interest are Machine Learning, Digital Image Processing, Deep Learning, Image Forensics, Computer Vision.
- **Mr. Kaustubh Ranjan Singh**, M.Tech, Ph.D. (Pursuing), Areas of Interest are Cellular Communication, Digital Communication, Wireless Communication, Information Theory & Error Control Coding.
- **Dr. Sachin Taran**, Ph.D., Postdoc, Areas of Interest are Adaptive Signal Processing, Non-Stationary Signal Analysis and Classification and Optical Imaging.
- **Dr. Sumit Kale**, Ph.D., Areas of Interest are Microelectronics, VLSI Design and Novel Semiconductor Devices.

- **Dr. Sonal Singh**, Ph.D, Areas of Interest are Electronics & Communication, Nanotechnology.
- **Dr. Anukul Pandey**, Ph.D, Areas of Interest are Signal Processing, Biomedical Signal/Image Processing, Machine Learning.
- **Ms. Lavi Tanwar**, M.Tech, Ph.D. (Pursuing), Areas of Interest are Signal Processing, Image Processing, Digital Watermarking.
- **Dr. Chhavi Dhiman**, Ph.D., Areas of Interest are Computer Vision, Image Processing, Machine Learning, Deep Learning, Human Action Recognition in Videos.
- **Dr. Sonam Rewari**, Ph.D, Area of Interest is VLSI Design.
- **Dr. Manjeet Kumar**, Ph.D, Areas of Interest are Signal processing and biomedical signal processing.
- **Dr. Deepika Sibal**, Ph. D, Areas of Interest are RF and Microwave Engineering
- **Mr. M. Ganesh**, M.Tech, Ph.D (Pursuing), Areas of Interest are Antenna Array Analysis and Design, Microwave Engineering.
- **Dr. Harikesh**, Ph. D, Areas of Interest are RF and Microwave Engineering.
- **Mr. Varun Sangwan**, M.Tech, Ph.D. (Pursuing), Areas of Interest are Image Processing, Computer Vision.
- **Mr. Vinay Kumar**, M.Tech, Area of Interest is microelectronics.



Students qualifying in state/national/ international level examinations during the current year

- Kunal Kashyap (2K17/EC/089) cleared GRE & TOEFL.
- Aditya Agrawal (2K17/EC/008) cleared GRE.
- Yashodhan Srivastava (2K17/EC/196) cleared GATE.
- Sonu Gill (2k17/EC/162) cleared AFCAT.
- Arnab Roy (2K17/EC/037) cleared GATE.
- Divyanshu Yadav (2K17/EC/60) cleared GATE
- Ankit Kumar (2K17/EC/027) cleared GATE

Details of student progression to higher education (previous graduating batch) (the current year)

- Omar Ali Mze (2K17/EC/107) joined the Electronics program in Université des sciences de momtpellier
- Kunal Kashyap (2K17/EC/089) joined the Master of Science program in New York University.
- Aditya Agrawal (2K17/EC/008) joined the Masters in Artificial Intelligence program in Boston University.
- Ankit Dutta (2K17/EC/24) joined the MSc Cloud Computing program in National College of Ireland.
- Nayanika Biswas (2K17/EC/109) joined the MS ECE program in University of California San Diego, University of Pennsylvania.
- Anindya Chakraborty (2K17/EC/021) joined the Management Information System/ Business Information System program in Monash University

Students provided with financial support to attend Conferences, Seminars, etc.

- Mr. Anvit Negi (2K17/EC/034) received a financial sanction (₹ 8000/-) for presenting a paper at the International Conference on Distributed Computing and Optimization Techniques (ICDCOT 2021).
- Mr. Kunal Kashyap (2K17/EC/90), Mr. Lalit (2K17/EC/93) and Mr. Daksh Shah (2K17/EC/52) received a financial sanction (₹ 7300/-) for presenting a paper at the INCET 2021 (International Conference on Emerging Technologies).
- Mr. Kenneth Toppo (2k17/EC/082), Mr. Neeraj Kumar (2k17/EC/111) and Mr. Preet Kumar (2k17/EC/130) received a financial sanction (₹ 9500/-) for presenting a paper at the 4th international conference on computer networks and inventive communication technologies.

Details of capability enhancement and development schemes organized by the department

- One week Online Faculty Development Program on “Nascent Methodologies, Challenges and Realms of Research” coordinated by Prof. Poornima Mittal and Prof. Gurjit Kaur (3rd - 7th October, 2020).
- One week Online Workshop on “Deep Learning and its Applications” coordinated by Prof. S. Indu and Dr. N. Jayanthi (23rd - 27th March, 2021).
- One day workshop on "Intellectual property rights and IP management" was organised by Dr. Gurjit Kaur on 16 March, 2021.
- One week Short Term Training Program (STTP) on “Emerging Nanoscale Devices, Circuits and its Applications” coordinated by Dr. Sumit Kale and Mr. Sachin Dhariwal (10th - 14th May, 2021)

- One-day Online Workshop on “Innovation and Startup Ecosystem Enablers from regional/state/national level” coordinated by Mr. Varun Sangwan (23rd June, 2021)
- Six week Summer Internship Program in Collaboration with IEEE BLP on “Practical Aspects of RTL Design/IoT Systems” coordinated by Prof. S. Indu and Dr. Devanand.
- Technical Session on “Introduction of ASIC Design Flow” by Mr. Ankur Sangal (Sr. Application Engineer) coordinated by Prof. Rajeshwari Pandey on 22nd July, 2021.

Students' Achievements

- Pratiksha Pradhan was the winner of International Speech Contest of Toastmasters International, Area E1 Level, 2020.
- Pratiksha Pradhan got awarded with the Grace Hopper Celebration Student Scholarship 2021.
- Anurag scored a Rank 8 in Pandemic Fitness Run in March 2021.
- Manmohan Mathur won the Outstanding Student Volunteer Award at IEEE Delhi Section Student Award Ceremony.
- Samarth Goyal won the Outstanding Student Volunteer Award at IEEE Delhi Section Student Award Ceremony.
- Anshul Gupta won the J K Pal Memorial Award at IEEE Delhi Section Student Award Ceremony.
- Aditya Verma won the J K Pal Memorial Award at IEEE Delhi Section Student Award Ceremony.
- Nitin Dhemiwal won the Outstanding WIE Volunteer Award at IEEE Delhi Section Student Award Ceremony.
- Lavanisha Prasad won the Outstanding WIE Volunteer Award at IEEE Delhi

Section Student Award Ceremony.

- Manmohan Mathur was awarded the IEEE Delhi Section Student Network Award.
- Harshit Gupta was awarded the IEEE Delhi Section Student Network Award.
- Nitin Dhemiwal was awarded the IEEE Delhi Section Student Network Award.
- Saurabh Patel was awarded the IEEE Delhi Section Student Network Award.
- Utkarsh Singh was awarded the IEEE Delhi Section Student Network Award.

Recognition by Government Agencies

- Design of Ultrasonic Pattern Generator and 3-D View generation using Fusion for RCT, sponsored Research Project in collaboration with Maulana Azad Institute of Dental Sciences sponsored by DST.
- Sponsored Research Project on Fine and Intelligent, Automatic tuning of High Power Microwave Filter.
- Development of frame work for imaging, restoring and archiving inscription and manuscript, Sponsored Research Project by DST.
- Development & deployment of Motor Controller for Low to Medium Power Electric Vehicle, Sponsored Research Project by MeitY.
- Development of Flexible and efficient optical fiber Network for smart cities, sponsored by Delhi Technological University, Delhi.
- Green EARTH: Green Energy Aware Radio Technology for Cognitive Network with Heterogeneity” under the WOS-A Scheme of DST, Sponsored Research Project by DST.

Grants for research sponsored by non-government organizations

- UAS-DTU, Unmanned Aerial Vehicles research sponsored by Adani Defence and Aerospace

Teachers/staff/students who received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the current year

- Prof. S Indu received Commendable research award in 2021.
- Dr. Priyanka Jain received Commendable research award in 2021.
- Dr. Poornima Mittal received Commendable research award in 2021.
- Prof. Neeta Pandey received Commendable research award in 2021.
- Dr. N Jayanthi received Commendable research award in 2021.
- Mr. Avinash Ratre received Commendable research award in 2021.
- Dr. Chhavi Dhiman received Premier research award in 2021.
- Prof. OP Verma received Commendable research award in 2021.
- Mr. Rahul Thakur received Commendable research award in 2021.
- Dr. Sachin Taran received Commendable research award in 2021.

Detail of teachers attending professional development Programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the current year

- Prof. Neeta Pandey attended one week FDP on Nascent Methodologies,

Challenges and Realms of Research organized by Deptt. of ECE, DTU during 3rd - 7th October, 2020.

- Prof. Rajeshwari Pandey attended “Nascent Methodologies, Challenges and Realms of Research” held from 3rd - 7th October, 2020, organized by Department of Electronics and Communication Engineering, Delhi Technological University, Delhi, India.
- Prof. Rajeshwari Pandey attended One week online Short Term Training Program on “Emerging Nanoscale Devices,Circuits and Its Applications (NANODC-21)” held from 10th - 14th May, 2021 organized by Department of Electronics & Communication Engineering, Delhi Technological University, Delhi, India.
- Dr. Gurjit Kaur attended Innovation ambassador training (Foundation level, total 16 sessions of 30 contact hours) conducted by MoE's Innovation Cell and AICTE 5th-31st August, 2021 in online Mode.
- Prof. Rajeshwari Pandey attended Two days online training on “Advance Course on Procurement Policy and Procedures” organized by National Productivity Council (Under Ministry of Commerce & Industry, Govt. of India) from 23rd - 24th June, 2021.
- Prof. Gurjit Kaur attended one week FDP on Advances in Optical Networks: Emerging Research Areas organized by Deptt. of ECE, Chitkara University, Punjab, India during 3rd - 7th August, 2020.
- Prof. Gurjit Kaur attended one week FDP on "Nascent Methodologies, Challenges and Realms of Research" organized by Deptt. of ECE, DTU during 3rd - 7th October, 2020.

- Prof. Gurjit Kuar attended one month Faculty induction/orientation program with A+ grade organized by BVICAM Delhi during 1st - 31st August, 2020.
- Prof. Poornima Mittal attended five days workshop on "Structural Audit For Earthquake Safety" organized by Deptt. of Civil, DTU during 24th - 28th November, 2020.
- Prof. Poornima Mittal attended one week FDP on "Robotics organized by MNNIT Allahabad" during 2nd - 6th November, 2020.
- Prof. Poornima Mittal attended one week FDP on "Internet of Things (IoT)" organized by IIIT, Kota during 12th - 16th October, 2020.
- Prof. Poornima Mittal attended one month Faculty Induction/Orientation Program with A+ grade organized by BVICAM Delhi during 1st - 31st August, 2020.
- Mr. Rahul Thakur attended one week FDP on Information Security in The Era of Deep Learning: Challenges & Opportunities organized by DTU, Delhi India during 8th - 12th February, 2021.
- Mr. Rahul Thakur attended one week FDP on Empowering the Moral Values, Ethics and Behavioral Attitude in Teaching Skills among Teachers organized by Dr. N.G.P. Institute of Technology, Coimbatore during 18th - 23rd January, 2021.
- Mr. Rahul Thakur attended one week FDP on "Nascent Methodologies, Challenges and Realms of Research" organized by Deptt. of ECE, DTU during 3rd - 7th October, 2020.
- Mr. Ajai Kumar Gautam attended one week FDP on "Machine Learning and Computer Vision: Applications, Research Challenges" held during 24th - 28th August, 2020.
- Dr. Deva Nand attended one week FDP on "Nascent Methodologies, Challenges and Realms of Research" organized by Deptt. of ECE, DTU, held during 3rd - 7th October, 2020.
- Dr. Deva Nand attended workshop on "AI for Everyone" organized by Deptt of CSE, Stenford University during 25th August to 29th September, 2020.
- Dr. Deva Nand attended one week FDP on "Outcome Based Engineering Education and Accreditation (OBEEA 2020)" organized by NIT Meghalaya, during 21st - 23rd September, 2020.
- Dr. Deva Nand attended symposium on "Int. summit on Quality Indices in higher education-2020" organized by ESCI and DTU Delhi during 6th - 7th November 2020.
- Mr. Anurag Chauhan attended workshop on "Internet of Things- A Project based Learning using Virtual IoT Lab" organized by NITTTR Chandigarh during 17th July - 7th August, 2020.
- Dr. Sudipta Majumdar attended workshop on "Internet of Things with Machine Learning using Python" organized by NIT Suratkhal & Pantech Learning during 14th September - 17th October, 2020.
- Mr. Sachin Dhariwal attended one week FDP on "Modelling and Simulation in Design and Manufacturing (MSDM-2020)" organized by MANIT Bhopal, during 5th - 9th October, 2020.
- Mr. Kaustubh Ranjan Singh attended one week FDP on "Nascent Methodologies, Challenges and Realms of Research" organized by Deptt of ECE, DTU during 3rd - 7th October, 2020.
- Dr. Varun Sangwan attended one week FDP on "Nascent Methodologies,

- Challenges and Realms of Research" organized by Deptt of ECE, DTU during 3rd - 7th October, 2020.
- Dr. Manjeet Kumar attended one week FDP on "Efficacy of Digital Pedagogy for Effective Online Teaching Learning" held during 8th - 15th October, 2020.
 - Dr. Manjeet Kumar attended FDP on "Outcome Based Engineering Education and Accreditation (OBEEA 2020)" organized by NIT Meghalaya, during 21st - 23rd September, 2020.
 - Mr. Piyush Tewari attended Faculty Induction Program on Online Induction Training/Orientation Programme for Faculty in Universities/Colleges/ Institutions of Higher Education to be conducted by Teaching Learning Centre & Research Development and Services Cell, Ramanujan College, University of Delhi during 1st - 30th September, 2020.
 - Mr. Piyush Tewari attended Online Faculty Development Programme on "Advanced Pedagogical Techniques", jointly organized by Teaching Learning Centre & Research Development and Services Cell Ramanujan College, University of Delhi during 29th October - 5th November, 2020.
 - Dr. Yashna Sharma attended one month Induction Training/Orientation Programme for Faculty organized by the Teaching Learning Centre, Ramanujan College, Delhi University from 10th November to 9th December, 2020
 - Dr. Yashna Sharma attended two weeks Refresher Course in Engineering, Physical Sciences and Management from Bharati Vidyapeeth's Institute of Computer Applications and Management (BVICAM), New Delhi from 19th - 31st October, 2020
 - Dr. Yashna Sharma attended one-week Faculty Development Programme on 'Advanced Pedagogical Techniques' from Teaching Learning Center, Ramanujan College, University of Delhi from 29th October to 5th November, 2020
 - Dr. Yashna Sharma attended one-week Faculty Development Programme on "ICT - based Learning and Developing MOOCs for Teaching Process in Higher Education" from 29th December 2020 to 4th January 2021
 - Dr. Yashna Sharma attended one week STTP on "Emerging Nanoscale Devices, Circuits and Its Applications (NANODC-21)" from 10th -14th May, 2021
 - Ms. Sonal Singh attended workshop on "Deep Learning & its Application" Organized at DTU in online mode during 23rd - 27th March, 2021.
 - Ms. Sonal Singh attended symposium on "Emerging Nanoscale Devices, Circuits, and Its Applications" organized by DTU in online mode during 10th - 14th May, 2021.
 - Dr. Deva Nand attended symposium on "Emerging Nanoscale Devices, Circuits, and Its Applications" organized by DTU in online mode during 10th - 14th May, 2021.
 - Dr. Deva Nand attended workshop on Deep Learning & its Application Organized at DTU in online mode during 23rd - 27th March 2021.
 - Dr. Sonam Rewari attended symposium on Emerging Nanoscale Devices, Circuits, and Its Applications organized by DTU in online mode during 10th - 14th May, 2021.
 - Mr. Ajai Kumar Gautam attended workshop on Deep Learning & its

- Application Organized at DTU in online mode during 23th - 27th March, 2021.
- Mr. Ajai Kumar Gautam attended symposium on Emerging Nanoscale Devices, Circuits, and Its Applications organized by DTU in online mode during 10th - 14th May, 2021.
 - Mr. Ajai Kumar Gautam attended AICTE sponsored FDP on Robotics and Automation organized by JMI Delhi during 16th - 30th June, 2021.
 - Dr. Alok Kumar Singh attended symposium on Emerging Nanoscale Devices, Circuits, and Its Applications organized by DTU in online mode during 10th - 14th May, 2021.
 - Dr. Chhavi Dhiman attended workshop on Deep Learning & its Application Organized at DTU in online mode during 23rd - 27th March, 2021.
 - Dr. Chhavi Dhiman attended one-day workshop on Innovation and Startup Ecosystem Enablers from Region/ State/ National Level organized by Deptt. of ECE, DTU on 23rd June, 2021.
 - Dr. Chhavi Dhiman attended symposium on Emerging Nanoscale Devices, Circuits, and Its Applications organized by DTU in online mode during 10th - 14th May, 2021.
 - Ms. Kriti Suneja attended workshop on Deep Learning & its Application Organized at DTU in online mode during 23th - 27th March, 2021.
 - Ms. Kriti Suneja attended symposium on Emerging Nanoscale Devices, Circuits, and Its Applications organized by DTU in online mode during 10th - 14th May, 2021.
 - Ms. Kriti Suneja attended five days online workshop on Emerging CMOS Technologies and Beyond: Trends and Challenges organized by MNIT Jaipur during 26th - 30th November, 2020.
 - Ms. Kriti Suneja attended One-Week Online Faculty Development Program on “Leadership Mastery Through Self-Management” organized by Centre for Value Based Education, Delhi Technological University, Delhi and Heartfulness Education Trust Delhi, during 19th - 23rd July, 2021.
 - Ms. Kriti Suneja attended FDP on Ethics and Values in Technical Education in Context of National Education Policy-2020 organized by Centre for Value Based Education, Delhi Technological University, Delhi during 15th - 19th April, 2021.
 - Ms. Kriti Suneja attended one week FDP on Nascent Methodologies, Challenges and Realms of Research organized by Deptt of ECE, DTU during 3rd - 7th October, 2020.
 - Ms. Kriti Suneja attended workshop on "Web Development (HTML , PHP & MYSQL)" organized by Finland labs during 14th - 25th December, 2020.
 - Ms. Lavi Tanwar attended workshop on "Deep Learning & its Application" Organized at DTU in online mode during 23rd - 27th March, 2021.
 - Ms. Lavi Tanwar attended symposium on "Emerging Nanoscale Devices, Circuits, and Its Applications" organized by DTU in online mode during 10th - 14th May 2021.
 - Ms. Lavi Tanwar attended one-day workshop on "Innovation and Startup Ecosystem Enablers from Region/ State/ National Level" organized by Deptt. of ECE, DTU on 23rd June, 2021.
 - Ms. Lavi Tanwar attended One-week online Faculty Development Program on “Nascent Methodologies, Challenges and Realms of Research” held from

- 3rd to 7th October, 2020 organized by Department of Electronics and Communication Engineering, Delhi Technological University, Delhi, India.
- Ms. Lavi Tanwar attended 8-days online course on “Antenna Design and Simulation” held from 14th - 22nd December, 2020 organized by Department of Electronics and Communication Engineering, KIET, Ghaziabad and Numergion Technology Pvt. Ltd., India.
 - Ms. Lavi Tanwar attended One-day E-Workshop on “Innovation and Startup Ecosystem Enablers from Region/ State/ National Level” held on 23rd June, 2021 organized by Department of Electronics & Communication Engineering, Delhi Technological University, Delhi, India.
 - Ms. Lavi Tanwar attended Online Orientation Program for newly Recruited faculty members of Electrical, Electronics and Communication, Computer, IT, School of Management, and USME of Delhi Technological University organized by the Human Resource Development Centre (HRDC), Delhi Technological University from 6th - 7th January 2021.
 - Dr. Manjit Kumar attended workshop on "Deep Learning & its Application" Organized at DTU in online mode during 23rd - 27th March, 2021.
 - Dr. Manjit Kumar attended AICTE sponsored FDP on "Empowering the Moral Values, Ethics and Behavioural Attitude in Teaching Skills among Teachers" organized by Department of Electronics and Communication Engineering, Dr. N.G.P. Institute of Technology, Coimbatore, India during 19th -24th April, 2021.
 - Dr. Manjit Kumar attended symposium on Emerging Nanoscale Devices, Circuits, and Its Applications organized by DTU in online mode during 10th - 14th May, 2021.
 - Dr. Manjit Kumar attended FDP on "Use of ICT in Engineering Education" organized by MSIT Janakpuri New Delhi during 7th - 13th April 2021.
 - Prof. Poornima Mittal attended symposium on "Emerging Nanoscale Devices, Circuits, and Its Applications" organized by DTU in online mode during 10th - 14th May 2021.
 - Mr. Rahul Thakur attended FDP on "Ethics and Values in Technical Education in Context of National Education Policy-2020" organized by Centre for Value Based Education, Delhi Technological University, Delhi during 15th - 19th April, 2021.
 - Mr. Rahul Thakur attended one-day workshop on "Innovation and Startup Ecosystem Enablers from Region/ State/ National Level" organized by Deptt. of ECE, DTU on 23rd June, 2021.
 - Mr. Sachin Dhariwal attended Short Term Course on "Nano-Sensors" organized by IIT Jodhpur under AICTE Training & Learning (ATAL) programme during 5th - 9th July 2021.
 - Mr. Anurag Chauhan attended 2 weeks online industrial training on “Artificial Intelligence and Machine Learning- A Project based Learning Approach” organised jointly by National Institute of Technical Teachers Training and Research Chandigarh and Xtrans Solutions Pvt. Ltd., Bangalore from 22nd July - 5th August, 2020.
 - Mr. Anurag Chauhan attended AICTE, Quality Improvement Scheme (AQIS)

Funded One week Online Short Term Training Programme (STTP) on Teaching Learning Pedagogies organized by A.G. Patil Polytechnic Institute from 07th - 12th September, 2020.

- Mr. Anurag Chauhan attended one week FDP on “Advanced Pedagogical Techniques” from Teaching Learning Centre, Ramanujan College, University of Delhi, Delhi (Ministry of Human Resource Development, Pandit Madan Mohan Malviya National Mission on Teachers and Teaching (PMMMNMTT)) from 28th October - 5th November, 2020.
- Mr. Anurag Chauhan attended one week Short Term Training Program (STTP) on “Teaching Learning Pedagogies” from A.G. Patil Polytechnic Institute, Solapur, Maharashtra from 13th - 12th September, 2020.
- Dr. Deepika Sibal attended Faculty Development Program on “Nascent Methodologies, Challenges and Realms of Research” held from 3rd to 7th October, 2020 organized by Department of Electronics and Communication Engineering, Delhi Technological University, Delhi, India.
- Dr. Deepika Sibal attended workshop on “Deep Learning and its Application” during March 23rd - 27th, 2021 organized by the department of Electronics and Communication Engineering, DTU.
- Dr. Deepika Sibal attended one-week workshop on “MIMO and Beamforming Antennas for wireless and satellite Applications” during April 26th - 30th, 2021 organised by IEEE AP-S Chapter Jaipur sponsored.
- Dr. Deepika Sibal attended two-day Orientation Program for Newly Recruited

Faculty Members of DTU (6th - 7th January, 2021) by Delhi Technological University Human Resource Development Centre (HRDC).

- Dr. Sumit Kale participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on “Nanotechnology for Electronic and Photonic Devices (NanoDev 2021)” from 12th - 16th July, 2021 at Punjab Engineering College (Deemed to be University), Chandigarh.
- Dr. Sumit Kale participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on “Nano-Sensors” from 5th - 9th July, 2021 at Indian Institute of Technology Jodhpur.
- Dr. Sumit Kale participated in one day E-Workshop on “Innovation And Startup Ecosystem Enablers From Region/ State/ National Level” held on 23th June, 2021 organized by Department of Electronics & Communication Engineering, Delhi Technological University, Delhi, India.
- Dr. Sumit Kale participated in one day “Virtual Symposium on Recent Technological Advancement in Wide/ Ultra-wide Bandgap Semiconductor Materials, Devices and Applications: A Step Towards Atma Nirbhar Bharat held on 10th April, 2021 organized by BITS Pilani.

Faculty visit to other institutions for taking Experts’ Lectures and other academic works

- Prof. Neeta Pandey delivered an expert lecture on "Advanced VLSI Design and applications with hands on CADENCE Tools in six days online STTP" organized by Deptt of ECE, ABES Engineering College Gaziabad, UP, India.

- Prof. O.P. Verma delivered an expert lecture on "Cloud Computing, Cloud Deployment and service models in one week STTP on Cloud Computing" organized by RGNIYD in collaboration with NIT Jalandhar through online mode.
- Prof. O.P. Verma delivered an expert lecture on Fog Computing in one week STC on "Cloud of Things: Theoretical and Practical Implications" organized by Deptt. of IT, NIT Jalandhar.
- Prof. O.P. Verma delivered an expert lecture on "Nature based optimization algorithms and their application in fuzzy edge detection" in TEQIP-III sponsored one week STTP on Recent advances in Data Science, Image and Natural Language Processing (RADSINP-2020) organized by NIT Jalandhar through online mode.
- Prof. O.P. Verma delivered an expert lecture on "Soft Computing: theories and Applications" in TEQIP-III sponsored online one week STC on Soft Computing in Deptt. of IT, NIT Jalandhar.
- Dr. Yashna Sharma delivered an expert lecture on "Optical Fiber Sensors and Systems: A Perspective and Recent Advances" at HMR Institute of Technology and Management
- Dr. Deepika Sipal delivered an expert lecture in one week workshop on "MIMO and Beamforming Antennas for Wireless and Satellite applications" sponsored by IEEE APS Chapter Jaipur.
- Dr. Anukul Pandey delivered an expert talk on "Advances in Communication and Signal Processing" in Short Term Course organized by Department of Electronics and Communication Engineering, Dr. B R Ambedkar National Institute of technology, Jalandhar.
- Dr. Anukul Pandey delivered an Expert Talk for one session in one week Online Faculty Development Program sponsored by AICTE-ISTE on "Industrial Application of MATLAB" organised by Department of Electrical and Electronics Engineering.
- Dr. Rohit Kumar delivered an expert talk in Faculty development program on "Emerging trends in Networks & IoT" organized by Infinity Management & Engineering College, Sagar, M.P. India.
- Dr. Rohit Kumar delivered an expert talk in faculty development program on "Industrial application of MATLAB" organized by Ojaswini Institute of Technology and Management, Damoh, M.P. India.

4.10 Department of Electrical Engineering

Prof. Uma Nangia, HoD



ACADEMIC PROGRAMMES

- B. Tech. (Electrical Engineering)
Intake: 302
Students Admitted: 301
- B. Tech. (Electrical Engineering)
(Continue Education)
Intake: 60
Students Admitted: 58
- M. Tech. (Control & Instrumentation)
Intake: 24+5
Students Admitted: 11
- M.Tech (Power Electronics and Systems)
Intake: 24+5
Student Admitted: 23
- M.Tech. (Power System)
Intake: 25+5
Students Admitted: 22
- Ph.D. Research Scholar: 30

LABORATORIES

The department has 17 well-equipped laboratories which include Basic Electrical Engineering Lab, Electrical Workshop, Junior Machines Lab, Senior Machines Lab, I&M Lab, LIC Lab, Electrical Energy Utilization Lab, Power Electronics Lab, Drives Lab, Control System Lab, Microprocessor & Microcontroller Lab, Process Control Lab, Power System Lab, Switchgear & Protection Lab, PS Simulation Lab, High Voltage Lab, Simulation Lab

SALIENT FEATURES

The Department of Electrical Engineering of Delhi Technological University is one among the first major departments to be established in 1941. The year 2020 marks the 79th year of Excellence (Platinum Jubilee) for both the University and the department in academics, research and innovation. The overall goal of the department is to provide quality education at undergraduate and postgraduate levels and undertake cutting edge research in several new areas of Electrical Engineering.

Faculty members of the department have been regularly contributing towards International and National Journals of repute like IEEE Transactions and IEEE Proceedings, IET, Journals in Electrical Engineering from Elsevier, etc. along with Proceedings of National and International Conferences.

The department has the distinction of organizing eight MHRD sponsored GIAN courses with International faculty and experts from Virginia Tech, USA; University of Victoria, Canada; Texas A&M University, Texas, USA; Technical University of Crete, Greece; BC Hydro Canada; College of Engineering, Michigan State University, USA. The students are motivated for technical and creative activities besides classroom teaching and laboratory exercise through technical fests like TROIKA; RENAISSANCE organized under the IEEE student chapter and IET student chapter

ACHIEVEMENTS

• Journal Publications	50
• Conference Publications	56
• Book Chapters	1



ACADEMIC STAFF

Professors: 21

- **Prof. Uma Nangia, (HoD)**, B.E., M.E., Ph.D, Areas of interest is Power Systems.
- **Prof. Madhusudan Singh**, B.Sc. (Engg.), ME (Hons), PhD, Areas of interest is Control & Instrumentation.
- **Prof. Narendra Kumar (I)**, B.Sc(Engg.) M.Sc.(Engg.), PhD, Areas of interest is Power Systems and Drives.
- **Prof. Narendra Kumar (II)**, BE, ME, Phd, Areas of interest are Instrumentation and Control & Power Electronics Applications.
- **Prof. Pragati Kumar**, M.Tech, Ph.D., Areas of interest is Control & Instrumentation.
- **Prof. Vishal Verma**, M.Tech, PhD, Areas of interest is Power Electronics.
- **Prof. Bharat Bhushan**, B.E.,M.E.,Ph.D, Areas of interest is Control & Instrumentation.
- **Prof. Rachna Garg**, M.Tech, PhD, Areas of interest are Power system operation and control, renewable energy systems, artificial intelligent techniques and smart grid.
- **Prof. Suman Bhowmick**, BEE (Hons.) MEE , Ph.D, Areas of interest are Power Systems, FACTS and VSC-HVDC.
- **Prof. S.T Nagarajan**, B.E,M.E, Ph.D, Areas of interest are High Voltage Engineering and Power System.
- **Prof. Alka Singh**, BE, M.Tech, Ph.D. Areas of interest is Power Systems.
- **Prof. Dheeraj Joshi**, BE, ME, PhD, Areas of interest are Power Electronics, Electric Drives and Renewable Energy Systems.
- **Prof. Mukhtiar Singh**, B.Tech., M.Tech, Ph.D., Areas of interest is Power Electronics and Drives.

- **Prof. M.M. Tripathi**, B. Tech, M.Tech, PhD, Areas of interest is Restructuring power systems, Artificial Intelligence (AI) application to load & price forecasting, Integration of renewable energy sources in electricity markets, Cyber Security of Smart Grid and Embedded Systems.
- **Prof. J.N. Rai**, M.Tech., PhD, Areas of interest is Power Systems.
- **Prof. Priya Mahajan**, ME, PhD, Areas of interest are Railway Electric Traction System, Power System and Electrical Machines.
- **Prof. R.S. Saha**, B.E, M.E, Ph.D, Areas of interest is HVDC & Power System.
- **Prof. Sudarshan K Valluru**, B.Tech. (E&EE), M.Tech(CAID), Ph.D, Areas of interest are Artificial Intelligence, Bio-Inspired Algorithms, Control of Dynamical systems, Bifurcation Analysis and Electrical Machines.
- **Prof. Mini Sreejith**, M.E. Ph.D, Areas of interest is Electrical Machines.
- **Prof. M. Rizwan**, B.Tech, M.Tech, PhD, Areas of interest is Power System.
- **Prof. Vinod Kumar Yadav**, B.Tech, M.Tech, Ph.D, Areas of interest is Power Systems.

Associate Professors: 04

- **Sh. N.K. Bhagat**, B.Sc(Engg.), M.Tech, Areas of interest is Control Systems.
- **Sh. Ram Bhagat**, B.Tech, M.E, Areas of interest is Control & Instrumentation.
- **Sh. D.C. Meena**, B.Tech, M.Tech, Areas of interest is Power System.
- **Sh. R.L. Meena**, BE.,M.Tech, Areas of interest is Power Quality.

Emeritus Professors: 02

- **Prof. N.K. Jain**, B.Sc. (Engg.), M.Sc(Engg), PhD, Areas of interest is Power Systems.
- **Prof. D.R. Bhaskar**, B.Tech, M.Tech, Ph.D, Areas of interest is Bipolar and MOS Analog Intergrated Circuits.

Assistant Professors: 25

- **Mr. A. B. Bhattacharya**, M. Tech., Areas of interest is Power System.
- **Dr. Bhavnesh Joint**, B.E, ME, Areas of interest is Electrical Engineering.
- **Mr. Prem Prakash**, B.E, M.Tech, Areas of interest is Engineering Systems.
- **Sh. A.R. Kulkarni**, B.E., M.E, Areas of interest are Control System Intelligent Transportation Systems, Microcontrollers & Embedded Systems and Robotics.
- **Mrs. Garima**, BE,M.Tech, Areas of interest are Analog and VLSI.
- **Sh. Sikandar Ali Khan**, B.Tech., M. Tech. Areas of interest are Electrical Machines, Electrical Drives and Power System.
- **Sh. Kuldeep Singh**, B.Tech, M.Tech Area of interest is Power Systems.
- **Ms. Ankita Arora**, B.Tech., M.Tech., Areas of interest are Renewable Energy Sources, Power Electronics, Electrical Machines, Artificial Intelligence Techniques and Control Systems.
- **Dr. Anup Kumar Mandpura**, B.Tech, M.Tech, Ph.D, Area of interest is Cooperative Communication Systems.
- **Sh. Himanshu Singh**, B.E., M.Tech, Areas of interest are Power Electronics,

Electrical Machines, Electrical Drives and Control System.

- **Sh. Saurabh Mishra**, B.E., M.Tech., Areas of interest is Electrical Drives.
- **Mrs. Shatakshi**, B.E., M.Tech, Areas of interest are Renewable Energy Systems and Power systems.
- **Dr. Prakash Chittora**, B.Tech, M.Tech, Ph.D., Power System, Power Quality, Power Electronics.
- **Mr. Shreyansh Upadhyaya**, B.Tech, M.Tech, Power Electronics, Control systems.
- **Mr. Abhishek Chaudhary**, B.E., M.Tech., Control System Engineering.
- **Dr. (Ms.) Rinchin Wangziom Mosobi**, B.E., M.Tech, Ph.D. Power Quality, Renewable Energy Sources.
- **Dr. Mayank Kumar**, B.Tech., M.Tech., Ph.D., Areas of interest are PWM of Power Converters, Modeling and Control of Power Electronics Converters and Solar Power Conversion.
- **Dr. Chaudhry Indra Kumar**, B.E., M.Tech, Ph.D., Areas of interest are Digital VLSI Circuit Design, Radiation Hardened IC

Design, Energy Efficient Circuit Design and Radiation Hardened Layout Design Techniques.

- **Mr. Gaurav Kaushik**, B.Tech., M.Tech., Areas of interest are Power Electronics and Control systems.
- **Ms. Anupama**, B.E., M.Tech., Areas of interest are VLSI, Analog Electronics and Digital Electronics.
- **Mr. Krishna Dutt**, B.Tech, M.Tech., Areas of interest are Power Electronics, Advance Power Electronics, Power Converters, Control of Power Electronics Converters, Custom Power Devices, FACTs and Machine.
- **Mr. Rohan Pillai**, B.Tech, M.Tech. Areas of interest is Microelectronics.
- **Dr. Vanjari Venkata Ramana**, B.Tech., M.Tech., Ph.D., Areas of interest is Power Electronics.
- **Dr. Avirup Maulik**, B.Tech., M.Tech., Ph.D., Areas of interest is Power Systems.
- **Dr. Rajesh Kumar**, B.Tech., M.Tech., Ph.D., Areas of interest are Control Systems and Instrumentation and Soft Computing.

Achievements of the Department

- Serving the nation since the last 79 years through education.
- Highly placed alumni in various reputed organizations and institutions across the world.
- The Department is accredited by National Board of Accreditation (NBA).
- The Department has been identified as a Quality Improvement Program Research Centre.
- The department currently has 17 laboratories and 13 dedicated research areas equipped with state-of-the-art facilities with the latest versions of software platforms. The laboratories are equipped with sophisticated equipments, test setups, FPGA based data acquisition systems, embedded controllers, Digital Signal Processors, Medium power Inverter-converters, various Electric Drives, PLCs, Power analyzers, spectrum analyzers, OPAL-RT, Phasor Measurement Units (PMUs), 300kV Impulse generator, 100 kV transformer etc. to name a few.
- The department is involved in carrying out several sponsored R & D projects funded by national agencies like AICTE, DST, SERB, NPIU and MeitY. Currently, sponsored projects from the DST and the AICTE amounting to more than 14.65 crores are presently underway in the department. The department is also engaged in consultancies in various fields of Electrical Engineering.

Participation in Professional Development Programmers by our Faculties

- Prof. J. N. Rai attended One Week Online Faculty Development Program

on “Power Quality and Reactive Power Management” organized by Department of Electrical Engineering, Delhi Technological University in association with Clariant Power System Ltd., Pune between 6th - 10th July, 2020.

- Prof. J. N. Rai attended International webinar on “Research Methodology: Paper Writing & Online tools, organized by Dept. of Electrical Engineering., SOBHASARIA Group of Institutions, Sikar, Rajasthan on 24th July, 2020.
- Prof. J. N. Rai Attended National level Webinar on “Ancient Indian Science and Technology” organized by NITTTR along and SPIU, Uttar Pradesh under guidance of Chairman, AICTE on 13th July, 2020.
- Prof. J. N. Rai Attended webinar on Outcome Based Education & Accreditation Post COVID organized by ASM Group of Institutes on 1st July, 2020.
- Mr. Kuldeep Singh attended one-week Faculty Development Programme on “Recent Development in Renewable Energy Systems” sponsored by TEQIP III, organised by Department of Mechanical, Automobile and Production & Industrial Engineering DTU during 25th - 29th November 2019.
- Mr. Kuldeep Singh attended TEQIP-III sponsored International Workshop on Geohazards Risk Reduction Initiatives in South and South East Asia (GeoRiskSEA-2019) during 21st - 22nd November, 2020.

Faculty visit to other institutions for taking Experts’ Lectures and other academic works

- Prof. Sudarshan Valluru delivered an expert talk on “Design of Controllers

for an Electromechanical Systems” on 28th August, 2020 from 02:30 PM - 4:00 PM during AICTE sponsored one week Online Short Time Training Program on “Micro Electro Mechanical Systems (MEMS), Mechatronics And Their Applications For Future Challenges” from 24th -29th August, 2020 at Department of Mechanical Engineering (Mechatronics) Mahatma Gandhi Institute of Technology Hyderabad-500075.

- Dr. Vinod Kumar Yadav delivered an expert lecture: On Recent Research Trends in Electrical Engineering 14-18 July 2020, School of Engineering, Gautam Buddha University, Greater Noida.
- Dr. Uma Nangia delivered an expert lecture on “Genetic Algorithm and its applications to Economic Load Dispatch” Dec 17th 2020, AKTU, Lucknow.
- Dr. Vinod Kumar Yadav delivered an expert lecture: on “Recent Trends in Renewable Energy Systems and Their Control (RESC-2020),” TEQIP-III Sponsored Online Short Term Course (September 14-18, 2020), Dr. B. R. Ambedkar National Institute of Technology, Jalandhar, Punjab (India).
- Dr. Vinod Kumar Yadav delivered an expert lecture: on “Stability Analysis, Protection and Control of Microgrid,” TEQIP-III Sponsored Online Short Term Course (September 25-29, 2020), Dr. B. R. Ambedkar National Institute of Technology, Jalandhar, Punjab (India).
- Dr. Vinod Kumar Yadav delivered an expert lecture: on “Human Values and Ethics” on July 7th , 2020, Sharda University, Greater Noida.

Teachers/Staff/Students receiving awards, recognition from Government recognised bodies

- Dr. Mukhtiar Singh, Professor, received Research Excellence Award.
- Dr. Alka Singh, Professor, received Research Excellence Award.
- Dr. Vishal Verma, Professor, received Research Excellence Award.
- Dr. Vinod Kumar Yadav, Associate Professor, received Research Excellence Award.
- Dr. Anup Kumar Mandpura, Assistant Professor, received Research Excellence Award.
- Dr. Ankita Arora Assistant Professor, received Research Excellence Award.
- Mr. Imran Ahmad Quadri Ph.D. Scholar, received Research Excellence Award.
- Dr. Ajay Kumar P.hD scholar received Research Excellence Award.
- Ms. Pallavi Verma PhD scholar received Research Excellence Award.

Grants for Research Projects sponsored by Govt. Sources

- Dr. Alka Singh received ₹68,00,000/- for Design, Development and Testing of Control and Synchronization of Power Electronics based Converters with Renewable Energy sources by SERB, DST, on 07-04-2017 for 3 years.
- Dr. Hitesh Dutt Mathur, Co PI- Dr.Dheeraj Joshi, received ₹16,83,100/- for IOT Based Energy Mangement System of Microgrid with Vehicle to Grid Feature by DST on 26-02-2019.

- Dr. M. Rizwan received ₹31,06,455 for Smart Dynamic energy management for built environment with integrated renewable energy by SERB, DST on 27-03-2019 for a period of 3 years.
- Prof. V. Verma received ₹22,53,600/- for Demonstration of grid supportive EV charger and charging infrastructure at LT level (D-EVCI) by DST on 12-06-2018 for a period of 3 years.
- Prof. V. Verma received ₹1,63,00,000/- for Design and Demonstration of off-grid self-healing and sustainable DC community energy solutions by DST for a period of 3 years.
- Prof. V. Verma received ₹36,63,000/- for Design and development of Bio-mass Solar Electricity and cooling solutions for rural India by DST on 12th July, 2018 for a period of 2 years.
- One-week Online Faculty Development on “Power Quality and Reactive Power Management”, in association with Clariant Power System Ltd., Pune during 6th - 10th July, 2020.
- Two days IEEE workshop and Exposition during 17th - 18th December, 2020.

Revenue generated from consultancy

- Prof. ABK Bhattacharya received a grant of ₹ 15,40,000 for his project "CCTV throughout in School" from PWD for the year 2019-20.
- Prof. ABK Bhattacharya received a grant of ₹ 15,00,000 approx for his project "Construction of additional classroom priority I & II (electrical)" from PWD for the year 2018-20.
- Prof. ABK Bhattacharya received a grant of ₹ 10,79,000 for his project "TPQA for various AIIMS project from HSCC" from AIIMS for the year 2019-20.
- Prof. ABK Bhattacharya received a grant of ₹ 10,00,000 for his project "BSES underground Cable laying work in Delhi" from BSES for the year 2019-20.

Professional Development Programmes organized by the Department

- One Week TEQIP-III Sponsored Faculty Development Programme on “Recent Research Directions and Key Concepts in Electrical Engineering” by Department of Electrical Engineering, DTU, Delhi from 2nd - 6th December, 2019.

4.11 Department of Environmental Engineering

Prof. S. K. Singh, HoD



ACADEMIC PROGRAMMES

- B. Tech. (Environmental Engineering)
Intake: 77
Students Admitted: 76
- M. Tech. (Environmental Engineering)
Intake: 24+5
Students Admitted: 13
- Ph.D. Research Scholars: 14

LABORATORIES

Department is actively involved in Consultancy, Research and Development and has well-established laboratories in all the areas of Environmental Engineering. The Department has well established laboratories in the area of Environmental Engineering and Microbiology, Solid Waste Management, Air & Noise Pollution Control, GIS and Remote Sensing. It provides technical support to national agencies such as CPCB, NMCG, DPCC, CPWD, and many more.

ACHIEVEMENTS

- | | |
|---------------------------|----|
| • Journal Publications | 26 |
| • Conference Publications | 2 |

SALIENT FEATURES

The Department of Environmental Engineering was created in February-2012. B.Tech, M.Tech. and Ph.D. programs are being offered. The Department provides an opportunity to working engineers for academic up-gradation by offering part-time post-graduate courses. The department envisions to produce technologically relevant Environmental Engineering graduates, post-graduates, and researchers through innovative applications of science, engineering & technology with globally acceptable curriculum and teaching-learning environment; and to create engineering leaders who can work in multi-disciplinary groups to anticipate and address evolving challenges sustainably for the betterment of human society.



ACADEMIC STAFF

Professors: 02

- **Prof. S. K. Singh**, HoD, B.E., M. Tech., Ph. D., FIE, FICS, FIEE, FIWRS, FIGS, FIAH, FIIBE, FIGV, FIOD, Solid waste processing, Wastewater treatment designs, Water treatment designs, Water quality modelling, Solar detoxification, EIA & Auditing.
- **Prof. Anil Kumar Haritash**, M.Sc., M. Tech., Ph.D., PAHs, Water Quality Assessment, Environmental Microbiology, Bioremediation, Constructed Wetlands.
- **Mrs. Lovleen Gupta**, B.E., M.S., PhD (Pursuing from IIT Delhi), Source apportionment of air pollutants, Human Health Risk Assessment, Climate change, GHG emission calculations, Environmental Impact Assessment, Environmental Site Assessment.
- **Dr. Rajeev Kumar Mishra**, M.Sc., M. Tech., PhD, Environmental implications of urban transport systems, Urban air pollution analysis & modelling, Traffic noise pollution modelling, Acoustics & barrier designing.

Assistant Professors: 04

- **Dr. Geeta Singh**, B. Tech., M. Tech., Ph.D., Water and Wastewater Engineering, Hydrology, Environmental Hydraulics, Water Resources, Groundwater Engg.
- **Sh. Gour Anunay Ashokkumar**, B.E., M.E., PhD (Pursuing), AMIE, Environmental Engineering, Water & Wastewater Engineering, Air Pollution, Industrial Waste Management, Environmental Impact Assessment, System Simulation & Modelling.

Achievements of the department

- The department is actively engaged in providing technical support to NGT for cleaning river Yamuna, NMCG for cleaning river Ganga, CPWD, DJB, and many more institutions.
- The department has inspected inter-mixing and trapping of drains joining river Yamuna.
- The department also provides technical support to various institutions such as The Institution of Engineers (India), International Development Centre Foundation (IDC Foundation), Green Institute for Research and Development (GIRD).
- Department undertakes and have completed performance audits of New, upcoming and existing STPs setup by DJB in Delhi.

Visit of faculty to other institution for taking Experts' Lectures/other academic work

- Prof. S. K Singh delivered an expert talk on "Sustainable Energy & Environmental Technology" organized by Government Engineering College, Ajmer, on 1st March, 2021.
- Dr. Anil Haritash delivered an expert lecture on "Multidisciplinary Aspects of Environmental Sciences" organized by SPA, Delhi and MoEFCC on 7th June, 2021.
- Dr. Anil Haritash delivered an expert lecture on "Recycling of Plastic Waste" organized by The Institution of Engineers, Faridabad on 17th April, 2021.
- Dr. Anil Haritash delivered an expert lecture on "Contaminant Transport through porous media and remediation

of contaminated soil" organized by MDU, Rohtak from 4th - 8th January, 2021.

- Dr. Anil Haritash delivered an expert lecture on "Rainwater Harvesting" organized by Nehru Yuva Kendra, Delhi and DPCC on 20th March, 2021.
- Dr. Anil Haritash delivered an expert lecture on "Environmental Impact Assessment" organized by MGICCC, Delhi from 14th - 18th December, 2020.
- Dr. Anil Haritash delivered an expert lecture on "Soil Remediation" organized by Civil Engg. Deptt., SBS Ferozpur, Punjab on 12th November, 2020.
- Dr. Anil Haritash delivered an expert lecture on "Solid Waste Management" organized by Civil Engg. Deptt., SBS Ferozpur, Punjab on 12th November, 2020.
- Dr. Anil Haritash delivered an expert lecture on "Municipal Solid Waste Management" organized by MGICCC, Delhi on 30th September, 2020.
- Mrs. Lovleen Gupta delivered an expert lecture on "Environmental Management at Grass-Root Level" organized by Graduate Women International, Geneva in association with University Women's Association of Delhi under the auspices of the Indian Federation of University Women's Association on 30th Jan. 2021.

Teachers/staff/students who received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the current year

- Prof. S. K. Singh is Member, Environmental Appraisal Committee, MoEFCC, Government of India.

- Prof. S. K. Singh is Member, Project Appraisal Committee, MoEFCCC, Government of India.
- Prof. S. K. Singh is Chairman, Departmental Promotion Committee, IASRI.
- Dr. Anil Haritash received prominent Alumnus Award (2021), conferred by GJUS&T, Hisar Haryana.

Revenue generated from consultancy during the current year (INR in Lakhs)

- Received a fund of ₹ 17.25 Lakh for Inspection of Gross Polluting Industries (GPIs) by DTU in River Hindon sub-basin by CPCB from September, 2020 to December, 2020.
- Received a fund of ₹16.52 Lakh for Remediation and Drain Management of all DDA Drains of Delhi by DDA, Delhi from July, 2020 to November, 2020.

Number of linkages with institutions/ industries for internship, on-the-job training, project work, sharing of research facilities etc. during the current year

- The linkage for Student Internship was established with Central Pollution Control Board (CPCB) from 2019 till date for B.Tech. and M.Tech. Students.
- The linkage for Student Internship was established with Delhi Pollution Control Committee (DPCC) from 2019 till date for B.Tech. and M.Tech. Students.

Detail of teachers attending professional development Programmes, viz., Orientation Programme, Refresher Course,

Short Term Course, Faculty Development Programmes during the current year

- Prof. S. K. Singh attended Management Development Programme on Professional Development Training organized by IIM Kozhikode during 25th - 30th January, 2021.
- Dr. Anil Haritash Participated in the One Week Faculty Development Programme on “Ethics and Values in Technical Education in Context of National Education Policy 2020” organized by Centre for Value Based Education, Delhi Technological University Delhi during 15th - 19th April, 2021.
- Dr. Anil Haritash attended Confidential Workshop organized by National Testing Agency (NTA), Delhi during 22nd - 26th December, 2020.
- Dr. Geeta Singh attended Two days International summit on "Quality Indices in Higher Education-2020" held online on 6th - 7th November, 2020 organized by DTU, Delhi.
- Dr. Geeta Singh attended online FDP of One week duration on “Structural Audit For Earthquake Safety” jointly organized by National Institute of Disaster Management, Ministry of Home Affairs, Govt. of India, Delhi and Department of Civil Engg., DTU during 24th - 28th November, 2020.
- Dr. Geeta Singh attended webinar on “Challenges and Opportunities in Polar Research” on 10th December, 2020 organized by Department of Environmental Science, Jamia Millia Islamia (Central University), New Delhi - 110025, INDIA.

- Mrs. Lovleen Gupta attended Participated in the One Week Faculty Development Programme on “Ethics and Values in Technical Education in Context of National Education Policy 2020” organized by Centre for Value Based Education, Delhi Technological University Delhi during April 15th - 19th, 2021.
- Mr. Aviral Aggarwal, a student of B.Tech. in Environmental Engineering is pursuing M.S. in Environmental Engineering from Stanford University, USA.
- Ms. Mahak Vashishth, a student of B.Tech. in Environmental Engineering is pursuing M.S. in Environmental Engineering from Cornell University, USA.

Detail of student progression to higher education (previous graduating batch) (the current year)

- Mr. Raghav Sharma, a student of B.Tech. in Environmental Engineering is pursuing M.S. in Environmental Engineering from Stanford University, USA.

Students' achievements

- Ms. Anushka Raj was the recipient of MITCAS Graduate Research Scholarship by the AICTE (All India Council for Technical Education), conducted 12 week internship at McMaster University, Canada.

4.12 Department of Humanities

Prof. Nand Kumar, HoD



ACADEMIC PROGRAMMES

- Ph.D. Research Scholars (Economics): 3

SALIENT FEATURES

The department of Humanities was established in the year 1941 with a view to impart necessary soft skills to the graduating engineering students. Initially courses in English, Economics and Accountancy were taught to the students. With the growing impetus on new courses like Econometrics, Gender and Technology and timely revision of syllabi of subjects like Engineering Economics and Communication Skills, a crossover between technical and non-technical aspects of learning is facilitated. The main objective is to give the students a comprehensive idea of the competition and the emerging work cultures to make them confident and market ready. To sensitize students towards technological need of poor and deprived for inclusive growth, B.Tech. students of all the branches are compulsorily asked to visit slum and prepare an assignment on the problems of slum and how knowledge of their branch of engineering can be used to improve life at slum.

In the current scenario we need engineers who can develop technologies that are sustainable, user friendly, effective and adaptable with respect to changing social and cultural realities. The humanities department is therefore actively engaged in the process of research work, courses and finishing lectures which are organized throughout the year for the benefit of students and teacher alike.

ACHIEVEMENTS

- Journal Publications 8



ACADEMIC STAFF

Professors: 02

- **Prof. Nand Kumar (HOD)**, Ph.D., Area of interest is Economics
- **Prof. Seema Singh**, Ph.D., Area of Interest is Economics

Assistant Professors: 01

- **Ms. Parinita Sinha**, M.A., M.Phil., Area of interest is English

Associate Professors: 02

- **Ms. Saroj Bala**, M.A., M.Phil., Area of interest is English
- **Dr. Rajiv Ranjan Dwivedi**, Ph.D., Area of Interest is English

Achievements of the department:

- Organised One Week Workshop on "Panel Data Analysis" from 17th - 22nd August, 2020.

Faculties attending Professional Development Programmes:

- Dr. Nand Kumar (General Chair), Prof. Seema Singh (Coordinator), Ms. Saroj Bala (Coordinator) and Dr. Rajiv Ranjan Dwivedi (Coordinator) Attended Dr. Rajiv

Ranjan Dwivedi workshop on Panel Data Analysis organised by Department of Humanities.

- Dr. Rajiv Ranjan Dwivedi attended One Week Faculty Development Programme on "Language in the Times of COVID-19" organised by Guru Gobind Singh Indraprastha University, Delhi from 25th - 30th June, 2020.
- Dr. Rajiv Ranjan Dwivedi attended Three Days FDP for for Student Induction on

“Universal Human Values” organised by Human Resource Development Centre & Centre for Value Based Education, Delhi Technological University, Delhi from 21st -23rd October, 2019.

- Saroj Bala attended Six-day Faculty Development Program on ‘Introspection & Gearing up for New Age Teaching Delivery-Post Covid 19’ organised by Dr. K.V. Subba Reddy Institute of Technology, Andhra Pradesh from 28th May - 2nd June, 2020.
- Saroj Bala One week Online Faculty Developmental Programme on ‘I.C.T. Tools for Effective Teaching Learning’ organised by Internal Quality Assurance Cell and Faculty of Humanities, Chintamani Mahavidhyalaya, Ghugus from 1st - 6th June, 2020.
- Saroj Bala attended a 10 Day Online Faculty Improvement Programme on ‘Developing Teachers’ Overall Personality’ organised by Prerna College of Commerce, Nagpur from 11th - 20th May, 2020.
- Saroj Bala attended One week Online Multi-Disciplinary Faculty Developmental Programme on “Moocs, E-Content Development and OCR” organised by Government First Grade College, Hungund, Karnataka from 28th - 3rd June 2020.
- Rajiv Ranjan Dwivedi attended GSUITE for Education Training (Online Teaching Classes) by HRDC on 6th July, 2020.

Faculty visit to other institutions for taking Expert’s lecture or other Academic works

- Rajiv Ranjan Dwivedi worked as a resource person at Heritage Society, Patna for “Dinkar Jayanti per Visehsh

Samvad” held on 23rd September, 2020.

- Rajiv Ranjan Dwivedi worked as a Resource person at Heritage Society, Patna for ”Hindi Diwasper Visehsh Samvad” on 14th September, 2020.
- Rajiv Ranjan Dwivedi delivered a guest Lecture at International Institute of "Research and Studies on the topic Research Methodology: Major Conceptual Concerns" on 29th August, 2020.
- Rajiv Ranjan Dwivedi delivered a guest Lecture at University School of Education, GGS IP University, Delhi on "Language and Personality: An Observation" dated 27th May, 2020.
- Rajiv Ranjan Dwivedi worked as a member for panel discussed at 12th ASIAD Literature Festival 2020 organized by Bharat Nirman at India International Centre, Delhi for the topic Poetry as a Literary Genre on 23th February, 2020.
- Saroj Bala worked as an Expert for Interview at WIT Dehradun on 6th September, 2019.
- Saroj Bala worked as an Expert for Viva at ABIT(Aryabhatt Institute of Technology), Delhi on 17th November, 2019 & 1st January, 2020.
- Saroj Bala visited Parshuram Instt. Of Technology on 29th November, 2019.
- Saroj Bala was the Co-ordinator for Indonesian delegation’s visit 25th September, 2019.
- Rajiv Ranjan Dwivedi delivered a lecture as a resource person on “Research Methodology for Ph.D. Course Work Programme” organized by Deptt of English, Ranchi University, Ranchi on 13th October, 2020.

- Rajiv Ranjan Dwivedi delivered a lecture on “Managing Time Effectively” on 17th May, 2021 for AICTE Training and Learning (ATAL) Academy Faculty Development Program (FDP) on Soft Skills at the Workplace: Developing Right Attitude, Etiquette and Communication (17th - 21st May 2021) organized by IIT, Patna.
- Dr. Rajiv Ranjan Dwivedi delivered a lecture on “Workplace Etiquettes” on 19-05-2021 for AICTE Training and Learning (ATAL) Academy Faculty Development Program (FDP) on Soft Skills at the Workplace: Developing Right Attitude, Etiquette and Communication (17th - 21st May, 2021) organized by IIT, Patna.
- Dr. Rajiv Ranjan Dwivedi delivered a talk as a resource person on 14th September, 2020 on the occasion of (Hindi Diwas per Visesh Samvad) organized by Heritage Society, Patna.

Grants for Research Projects sponsored by Non Govt Sources:

- Prof. Seema Singh (Principal Investigator) “Enhancing Employability Skills for Empowerment of Girls and Young Women” BRPID project of Graduate Women International (GWI), Geneva.
- Ms. Saroj Bala (Co-Investigator) worked on the TEQIP Collaborative Research Scheme, National Project Implementation Unit from June, 2019 to September, 2020.

Collaborative Activities for Research, Faculty Exchange, Students Exchange, etc:

- ‘Building Research Collaboration with India and Kyrgyzstan to explore the role of universities in developing skills for

smart cities’ in collaboration with faculties of Glasgow university, UK, International Univ. of Kyrgyzstan & the American Univ. of Central Asia, Bishkek, Kyrgyzstan was started in 2018, financially supported by Glasgow University. Prof. Seema Singh was a participant in the activity.

- Prof. Seema Singh was a panellist in Panel discussion on, “Women in the Engineering Labour Market in India” at APNN-2020, organized by TWiST, Taiwan on 25th October, 2020.

Professional Programmes, Development Conferences, Seminars, etc organized by the Department:

- A Workshop on Panel Data Analysis was organized from 17th - 22nd August, 2020 by Department of Humanities sponsored by DTU which had 150 participants.

Extension and Outreach Activities:

- Dr. Rajiv Ranjan Dwivedi was invited for poetry recitation organized by Heritage Society, Patna for the event, Virasat Kavi Sammelan on 9th August, 2020.
- Prof. Seema Singh is paper reviewer for Employee Relations- Emerald Insight 15th April, 2020.
- Prof. Seema Singh is paper reviewer for Equality, Diversity and Inclusion- An International Journal, Scopus Indexed, Emerald Publishing.
- Prof. Seema Singh is paper reviewer EURASIA Journal of Mathematics, Science and Technology Education ISSN: 1305-8223 (online) 1305-8215 (print).

- Prof. Seema Singh is paper reviewer Journal of Agricultural Science & Technology Impact Factor (2015): 0.815 Tarbiat Modares University, Iran.
- Prof. Seema Singh Chairperson Technical Session I, of two days GGSIPU Sponsored National Conference on “Digital Entrepreneurship” organized by Maharaja Surajmal Institute from 29th - 30th January, 2021.
- Prof. Seema Singh Chairperson Technical Session: Contemporary Issues – Entrepreneurship and Economics of the XXI Annual International Conference on Achieving Excellence in Higher Education at Deen Dayal Upadhyaya College, University of Delhi, New Delhi during 4th - 5th January, 2020.
- Dr. Rajiv Ranjan Dwivedi was facilitated with the Literary Excellence Award, 12th ASIAD Literature Festival 2020.
- Dr. Rajiv Ranjan Dwivedi was awarded with the Certificate of Appreciation for outstanding service as a Member of Editorial Board of SHE Journal, Universitas PGRI Madiun, Indonesia.
- Ms. Saroj Bala Awarded as a Speaker at International Conference on “Rama in Art, Tradition and Literature”, organized by Sachidanand Sinha College, Aurangabad and Intangible Cultural Heritage Department, Heritage Society, Patna.
- Parinita Sinha received the Best Paper Award for presenting her paper on “Error analysis for Identifying and Supporting Dyslexic Learners” on 6th June, 2021 in VICAASH Conference 2021.

Awarded International Fellowship for Advanced Studies/Research:

- Dr. Rajiv Ranjan Dwivedi received Best Paper Award for “Ram Versus Rama: Interrogating Phonetic Derogation” presented in International conference at Rama in Art, Literature and Tradition (29th - 30th August, 2020) organized by Heritage Society, Patna.

4.13 Department of Information Technology

Prof. Kapil Sharma, HoD



ACADEMIC PROGRAMMES

- B. Tech. (Information Technology)
Intake: 152
Students Admitted: 151
- M. Tech. (Information System)
Intake: 25+5
Students Admitted: 25
- Ph.D. Research Scholars: 6

LABORATORIES

Department has developed state-of-the-art laboratories in the various fields of Information Technology- Computer Networks Lab, Web Engineering Lab, Programming Lab, Information and Security Lab, Biometric Research Lab and many others.

ACHIEVEMENTS

- | | |
|---------------------------|----|
| • Journal Publications | 22 |
| • Conference Publications | 45 |
| • Book Chapters | 1 |

SALIENT FEATURES

The Department of Information Technology endeavors to provide the thrill of a corporate R&D environment with a planned focus on industrially relevant projects and technology incubation. The curriculum defined, lays greater emphasis on design principles and development of system software for Operating Systems, Database Management Systems, Malware Analysis, Artificial Intelligence, Data Mining, Computer Vision and Networks. Department has developed state-of-the-art laboratories in the various fields of Information Technology-Computer Networks Lab, Web Engineering Lab, Programming Lab, Information and Security Lab, Malware Analysis lab and Biometric Research Lab. Currently the department offers Doctorate, post-graduate & undergraduate courses. The department also has an active student chapter of Computer Society of India (CSI) and contributes significantly in professional activities undertaken by IEEE and IET student chapters.



ACADEMIC STAFF

Professors: 03

- **Prof. Kapil Sharma (HOD)**, B.E., M.Tech., Ph.D., Areas of Interest are Artificial Intelligence, Optimization, Evolutionary Computation, Software Engineering, Malware Analysis.
- **Prof. Dinesh Vishwakarma**, B.Tech, M.Tech., Ph.D., Areas of Interest are Machine/Deep Learning, Computer Vision, Human Action and Activity Recognition, Sentiment Analysis, Fake News Analysis, Rumour Detection, Statistical data analysis.
- **Prof. Seba Susan**, B.Tech., M.Tech., Ph.D., Areas of Interest are Pattern Recognition, Machine Learning, Computer Vision, Natural Language Processing, Data Mining, and Soft Computing.

Associate Professors: 01

- **Dr. Virender Ranga**, B.Tech., M.Tech., Ph.D., Areas of Interest are Wireless Adhoc & Sensor Network, Evolutionary Computations in Computer Networks, Machine Learning techniques in networking, Security issues in Cloud Computing, Security issues in Internet of Things (IoT), FoG computing, Internet of Robotic Things.

Assistant Professors: 07

- **Dr. Ritu Agarwal**, B.Tech., M.Tech., Ph.D. Areas of Interest are Information Security, Digital Forensics, Data Structures, Analysis and design of Algorithms, Cyber Security, Pattern Mining.

- **Ms. Anamika Chauhan**, B.Tech., M.Tech., Areas of Interest are Sensor Networks, Mobile and Vehicular Ad-hoc Networks, Internet of Things
- **Ms. Priyanka Meel**, B.Tech., M.Tech., Areas of Interests are Artificial Intelligence, Optimization Algorithms, Data Analytics, Social Media analysis, Fake news and rumour detection
- **Dr. Jasraj Meena**, B.Tech., M.Tech., Ph.D. Areas of Interests are Parallel and Distributed Computing, Cloud Computing, Workflow Scheduling, IoT with Machine Learning
- **Mr. Rahul Gupta**, B.Tech., M.Tech., Areas of Interests are Mobile Security, Artificial Intelligence, Machine Learning Social Media Mining
- **Dr. Bindu Verma**, B.Tech., M.Tech., Ph.D. Areas of Interests are Image Processing, Computer Vision, Hand Gesture, Affective Computing, Emotion Recognition, Deep Learning, Machine Learning
- **Ms. Varsha Sisaudia**, B.Tech., M.Tech., Areas of Interests are Image Processing, Evolutionary Algorithms, Soft Computing, Machine Learning.

Achievements of the Department

An amalgam of Computers and Telecommunications, Information Technology has changed the lives of people globally with applications apparent in every walk of life. Popular areas that encompass scope for IT and have grown in the recent years are medicine, E-Governance, entertainment and multimedia, scientific research, business intelligence solutions and knowledge discovery in databases. The department of Information Technology offers an undergraduate B.Tech. Course in Information Technology with an intake of 150 students every year. Designed in a way so as to provide the students with fundamental concepts and tools related to the field, the B.Tech (Information Technology) programme emphasizes on all basic subjects such as operating systems, computer architecture and design, malware analysis, software development, computer networks, wireless sensor networks, Big Data, artificial intelligence, natural language processing, Internet of Things, cloud computing, machine learning, and deep learning. Also, the department offers postgraduate studies in

Information Systems with an annual intake of 25 students. Specialized knowledge on analysis and design of Information system, information security, mobile communication, soft computing, artificial intelligence, big data, cloud computing, deep learning, computer vision and expert systems, web engineering is also imparted, along with various electives related to upcoming I.T. fields. A large number of B.Tech (IT) students have obtained admissions in foreign and national universities for M.S and M.B.A programs. Further, large number of publications in the international conferences by the undergraduate and post graduate students are the outcome of the research culture developed in the department. The department has a student society called the "Society for IT Engineers" (S.I.T.E.). Students regularly participate in national and international hackathons and other technical and non-technical competitions. The department aims at encouraging students to be a part of active working teams in practical industrial projects and technical work, enabling them to expand intellectually so that they can make their mark in the challenging IT industry.

Teachers Provided with financial support to attend Conferences, Seminars, etc.

- Prof. Seba Susan was provided a support of ₹ 6644/- for presenting her paper at ACM Symposium for Applied Computing (SAC) conference from 22nd - 26th March, 2021.
- Dr. Ritu Agarwal was provided a support of ₹ 2500/- to attend a 2 weeks online Industrial /Professional Training Program organized by Finland Labs in association with National Social Summit, IIT Roorkee from 24th August 2020 - 4th September, 2020.
- Ms. Anamika Chauhan was provided a support of ₹ 2500/- to attend a 2 weeks online Industrial /Professional Training Program organized by Finland Labs in association with National Social Summit, IIT Roorkee from 24th August, 2020 - 4th September, 2020.
- Ms. Priyanka Meel was provided a support of ₹ 8,200/- to IEEE International Conference on Computing, Communication, and Intelligent Systems (ICCCIS), Noida, India, 19th - 20th February, 2021.
- Ms Priyanka Meel was provided a support of ₹ 4,500/- to IEEE 11th International Conference on Cloud Computing, Data Science & Engineering (Confluence), Noida, India, 28th - 29th January, 2021.
- Dr. Jasraj Meena was provided a support of ₹ 2500/- to attend a 2 weeks online Industrial /Professional Training Program organized by Finland Labs in association with National Social Summit, IIT Roorkee from 7th - 18th September, 2020.

Participation in Professional Development Programme by our Faculties

- Ms. Priyanka Meel attended Refresher course in Research Methodology Devi

Ahilya Vishwavidyalaya, Indore, UGC - HRDC during 15th - 28th December, 2020.

- Ms. Priyanka Meel Induction/ Orientation programme for “Faculty in Universities/ Colleges/ Institutes of Higher Education” Teaching Learning Centre, Ramanujan College, University of Delhi, Delhi, MHRD during 10th November, 2020 - 9th December, 2020 (Four Week).
- Ms Priyanka Meel attended FDP on “Advanced Pedagogical Techniques” Teaching Learning Centre, Ramanujan College, University of Delhi, Delhi, MHRD during 29/10/2020 – 05/11/2020
- Ms Priyanka Meel attended FDP on “Nascent Methodologies, Challenges and Realms of research”, DTU, Delhi during 03/10/2020-07/10/2020.
- Ms Priyanka Meel attended FDP on “Mentoring Pedagogy & Application of ICT tools for Online Classroom Delivery of Teachers” IIT, Guwahati, MeitY during 14/09/2020-21-09/2020.
- Ms Priyanka Meel attended Online Industrial/Professional training program on “Internet of Things (IOT) Using Amazon AWS”, Finland Labs, IIT Roorkee, IIT Roorkee during 24/08/2020-04/09/2020.
- Dr. Bindu Verma attended FDP on Inculcating Universal Human Values in Technical Education, All India Council for Technical Education(AICTE) during 8th - 12th February, 2021.
- Dr. Bindu Verma attended Online Advanced FDP on "Machine Learning and Computer Vision", Vignans Foundation for Science Technology and Research University during 2021-7-5 to 2021-7-9.
- Dr. Bindu Verma attended Online Elementary FDP on "Machine Learning Frontiers in Healthcare, National Institute

Of Technology, Delhi during 2021-7-26 to 2021-7-30.

- Ms. Varsha Sisaudia attended NITTTR modules for freshly recruited teachers, NITTTR during Mar-Apr, 21.
- Dr. Ritu Agarwal attended 2 Weeks Instructor Led Live Online Industrial/ Professional Training Program on Internet of Things (IOT) Using Amazon AWS Finland Labs (A Unit of Revert Technology Pvt. Ltd.) In Association with National Social Summit, IIT Roorkee during 24 August - 04 September 2020.
- Dr. Ritu Agarwal attended One week International E-Workshop on Bioinformatics, Department of Biotechnology, DTU during 14-18 December 2020.
- Dr. Ritu Agarwal attended one day E-Workshop on “Innovation And Startup Ecosystem Enablers From Region/ State/ NationalLevel”, Department of Electronics & Communication Engineering, Delhi Technological University, Delhi, India.
- Dr. Ritu Agarwal attended Innovation Ambassador training (Foundation Level, Total 16 Sessions of 30 contact hours) conducted by MoE's Innovation Cell & AICTE, 5th August - 31st August 2021 in online mode.
- Dr. Ritu Agarwal attended Online Short Term Training Program on Information Security in the Era of Deep Learning: Challenges & Opportunities Organized by: Department of CSE, Delhi Technological University, Delhi Sponsored by: ISEA project, Phase-II, MeitY, Government of India held between 8 February to 12 February, 2021.
- Dr. Ritu Agarwal attended two days workshop on “Recent Trends in Image

Processing and Security” Department of Computer Science & Engineering, Madhav Institute of Technology & Science, Gwalior under the sponsorship of TEQIP-III, February 19-20, 2021.

- Dr. Ritu Agarwal attended One Day International E-Symposium on Women in Science, Department of Biotechnology, DTU, February 11, 2021.
- Dr. Jasraj Meena attended Online Professional Training/ FDP on Artificial Intelligence and Machine Learning 2020, Dept. of Education and Training Development Finland Labs, 7 September-18 September 2020 (Two weeks).
- Dr. Jasraj Meena attended Next-Generation Technologies, Teaching Learning Centre & Department of Computer Science Ramanujan College, University of Delhi during 29 June - 13 July 2021, online two-weeks refresher course.

Faculty visit to other institutions for taking Expert Lectures and other academic works

- Prof. Dinesh Vishwakarma delivered an invited talk in the International Webinar on "Data Science Using Python" for Bharathiar University, Coimbatore in Sept 2020.
- Prof. Dinesh Vishwakarma delivered an expert talk in a Online FDP on "Deep Learning for Visual Computing and Communication" organized by NIT Silchar and E&ICT Academy NIT Patna in Oct 2020.
- Prof. Dinesh Vishwakarma delivered an expert Lecture on "Role of Computer Vision in Internet of Things" in AICTE at SRM IST NCR Campus, Ghaziabad in Dec 2020.

- Prof. Dinesh Vishwakarma delivered an expert Talk on "Case study of Social media Data Analytics (Fake News)" in a AICTE on Data Science & its Applications at NIET, Greater Noida in Feb 2021.
- Prof. Dinesh Vishwakarma delivered an expert Talk on " Role of machine learning in Internet of Things" in One week "AICTE sponsored ATAL FDP on Internet of Things at I.T.S Engineering College, Greater Noida in Feb 2021.
- Prof. Dinesh Vishwakarma delivered an expert talk on "Human Pose and Emotion Analysis using Deep Learning and Its Applications" in a AICTE sponsored ATAL FDP on Research Trends in Computer Vision and NLP at NorthCap University, Gurugram in July 2021.
- Prof. Dinesh Vishwakarma delivered an expert talk on "Role of Computer Vision in IOT and its Applications" on Industry 4.0 and IoT at Integral University, Lucknow in July 2021.
- Prof. Dinesh Vishwakarma delivered a keynote talk in Faculty Development Programme on "Emerging Trends in Electrical and Electronics" at Hindustan College of Science & Technology, Farah Mathura in July 2021.
- Prof. Dinesh Vishwakarma delivered an expert talk on "Role of Machine Learning in IOT" on Advancements in Wireless Communications & Signal Processing –Leaping Towards 5G, at IIIT Noida in July 2021.
- Prof. Seba Susan was appointed as one of the external experts for syllabus review of PG course in Government Engineering College, Thrissur, Kerala in March 2021.

Collaborative activities for research, faculty exchange, student exchange

- Prof. Kapil Sharma is doing collaborative research with Delhi University jointly supervising a Ph.D candidate.
- Prof. Kapil Sharma is doing collaborative research with Samsung India Electronics Pvt. Ltd. & has jointly published a patent.
- Prof. Seba Susan is supervising a Ph.D student from Bharat Electronics (BEL).

Teachers who Received Awards & Recognition

- Prof. Kapil Sharma received Premier and Commendable DTU Research Excellence award in February, 2021 for his patent and SCI papers.
- Prof. Dinesh Kumar Vishwakarma, Professor received Premier and Commendable DTU Research Excellence Award in February, 2021 for SCI papers.
- Prof. Seba Susan, Professor received Commendable DTU Research Excellence Award in February, 2021 for SCI papers.
- Ms. Ritu Agarwal, Assistant Professor, received Commendable DTU Research Excellence Award in February, 2021 for SCI papers.
- Ms. Priyanka Meel, Assistant Professor, received Commendable DTU Research Excellence Award in February, 2021 for SCI papers.

Students provided with financial support to attend Conferences, Seminars, etc

- Mr. Ayush Agarwal received ₹6,000/- to present paper at International Conference on advanced Computing and Communication Systems (ICACCS

- 2021) at Eshwar College of Engineering, Coimbatore, Tamil Nadu, India from 19th - 20th March, 2021.
- Mr. Pranav Malik received ₹7000/- to present paper at 5th IEEE Conference on Computing Methodologies and Communication (ICCMC 2021) 7th – 9th April 2021 at Surya Engineering College, Erode, Tamil Nadu, India from 7th - 9th April, 2021.
 - Ms. Mini Jain received ₹14,556/- to attend 55th Annual Conference on Information Sciences and System at Johns Hopkins University, Baltimore USA from 24th – 26th March, 2021.
 - Mr. Kushank Kumar Chaudhary received ₹7500/- to present paper at International Conference on Artificial Intelligence and Smart Systems at JCT College of Engineering from 25th – 27th March, 2021.
 - Mr. Monil Bansal received ₹7000/- to present paper at International Conference Computing Methodologies and Communication (ICCMC 2021) at Surya Engineering College, Erode, Tamil Nadu, India from 8th – 10th April, 2021.
 - Ms. Shrinjal Singh received ₹7000/- to present paper at International Conference on Computing Methodologies and Communication (ICCMC 2021) at Surya Engineering College, Erode, Tamil Nadu, India from 8th – 10th April, 2021.
 - Mr. Aaryaman Bajaj received ₹6000/- to present paper at 5th International Conference on Intelligent Computing and Control Systems (ICICCS 2021) at Vaigai College Engineering, Madurai-Melur Road, Therkutheru, India from 6th – 08th May, 2021.
 - Mr. Chirag Gupta received ₹8000/- to present paper at Asian Conference on Innovation in Technology (ASIANCON 2021) at Pimpri Chinchwad College of Engineering & Research (PCCOER), Pune, India from 28th – 29th August, 2021.
 - Mr. Abhinav Choudhary received ₹8500/- to attend 5th International Conference on Design Innovation for 3C's Computer Communicate-Control (ICDI3C 2021) at MVJ College of Engineering Kasturba Road, Bangalore, India from 11th – 12th June, 2021.
 - Mr. Dhruv Jain received ₹7000/- to attend International Conference on Artificial Intelligence And Smart Systems at JCT College of Engineering from 25th – 27th March 2021.
 - Mr. Kritarth Bisht received ₹24,576/- to attend 5th International Conference on Information System and Data Mining 2021 from 28th – 31st May 2021.
 - Mr. Abhinav Singhal received ₹7000/- to attend International Conference on Artificial Intelligence and Smart Systems at JCT College of Engineering from 25th – 27th March 2021.

Students qualifying in state/national/ international level examinations during the current year

- Mr. Nakul Dodeja (B.Tech IT) qualified CAT (99.93%).
- Mr. Pratham Mittal (B.Tech IT) qualified CAT (99.79%).
- Ms. Himanshi Nimesh (B.Tech IT) qualified CAT.
- Mr. Sparsh Katiyar (B.Tech IT) qualified GRE (323/340).
- Mr. Raghav Sareen (B.Tech IT) has qualified the combined defence services examination, 2020.

Details of student progression to higher education

- Ms. Ruchika Goel (B.Tech IT) joined the M.S. (Computer science) program in Columbia University, USA.
- Ms. Tuhina Tripathi (B.Tech IT) joined the M.S. (Computer science) program in the University of Colorado, USA.
- Mr. Piyush Garg (B.Tech IT) joined the M.S. (Computer science) program in the University of Southern California, USA.
- Mr. Ayush Agarwal (B.Tech IT) joined the Master's program in Carnegie Mellon's School of Computer Science, USA.
- Ms. Meghna Bhatnagar (B.Tech IT) joined the Master's program in Georgia Institute of Technology, USA.
- Ms. Apoorva Verma (B.Tech IT) joined the Master's program in Arizona State University, USA.
- Mr. Anurag Dhasmana (B.Tech IT) joined the M.S. (Computer science) program in the UC Davis, USA.
- Mr. Imran Shahid (B.Tech IT) joined the M.S. (Computer science) program in the University of California, USA.
- Mr. Pratham Mittal (B.Tech IT) joined the M.B.A program in IIM, Calcutta.
- Mr. Nakul Dodeja (B.Tech IT) joined the M.B.A program in IIM, Calcutta.
- Ms. Himanshi Nimesh (B.Tech IT) joined the M.B.A program in IIM, Calcutta.
- Mr. Gaurav Panwar (B.Tech IT seventh semester) has co-founded and registered the startup Toptrove foundation in March 2021.
- Mr. Aman Jha (B.Tech IT seventh semester) was awarded the Indian Achiever's Award 2020 by Indian Achiever's Forum in Recognition of Outstanding Professional Achievement & Contribution in Nation Building.
- Aman Jha is Founder and CEO of startup Xero Technologies.
- Ms. Yashasvi Chahal (B.Tech IT fifth semester) was awarded the Google APAC Women Techmakers Scholars Program (WTM) scholarship 2020. She was among 74 girls selected from the Asia Pacific region.
- Mr. Garvit Gualti (B.Tech IT fifth semester) was first runner up in HackNagpur'20.
- Ms. Ashima Yadav, research scholar, received Commendable DTU Research Excellence Award in February, 2021 for SCI papers.
- Ms. Heena Hooda, research scholar, received Commendable DTU Research Excellence Award in February, 2021 for SCI papers.
- Ms. Srishti Vashishtha, research scholar, received Commendable DTU Research Excellence Award in February, 2021 for SCI papers.
- Mr. Nitin Jain, research scholar, received Commendable DTU Research Excellence Award in February, 2021 for SCI papers.

Students' Achievements

- Mr. Naman Aggarwal and Mr. Pradyuman Aggarwal (B.Tech IT seventh semester) have founded and registered their startup GeekHouse in May 2021 which is an ed-Tech startup.

4.14 Department of Mechanical Engineering

Dr. S.K. Garg, HoD



ACADEMIC PROGRAMMES

- B.Tech. (Mechanical Engineering)
Intake: 302
Students Admitted: 302
- B.Tech. (Mechanical Engineering) (Continue Education)
Intake: 60
Students Admitted: 23
- B.Tech. (Production and Industrial Engineering)
Intake: 77
Students Admitted: 76
- B.Tech. (Automotive Engineering)
Intake: 77
Students Admitted: 76
- M.Tech. (Production Engineering)
Intake: 24+5
Students Admitted: 10
- M.Tech. (Thermal Engineering)
Intake: 25+5
Students Admitted: 23+01(SPN)
- Ph.D. Research Scholars: 23

SALIENT FEATURES

The Department of Mechanical Engineering has seen considerable growth since its inception in 1941 with the intake rising from 30 to 450 (300 for Mechanical, 75 for production & Industrial Engineering, and 75 for Automobile Engineering). The department of Mechanical engineering also offers Post Graduate courses with specialization in Thermal Engineering and Production Engineering. Ph.D. Programs in all fields of Mechanical Engineering are also offered. In addition, the department also offers four years' B. Tech. Programme for working Diploma Engineers. The department has developed eco- friendly technology using alternate refrigerants in the RAC lab for re-directing global warming and Ozone depletion

LABORATORIES

The department possesses modern laboratories equipped with latest experimental set-ups and research facilities for instrumentation, experimental stress analysis, strength of materials, fluid mechanics, engines, automotive engineering, robotics, heat transfer, solar energy, flexible manufacturing system, computational fluid dynamics supported by Software like view-flex, CAD-CAM and I.e. engine design. CAD lab has Softwares like NX-LAD, NXCAM, AUTOCAD Inventor, Catia, Techomatix, Abacus, Iadino, NX-Nastran, Hyper mesh, hyper works, MDADAMS, Dynaform, etc. In addition, microprocessors, micro controllers, PIC, spectrum analyzer and logic analyzer are available for project work.

ACHIEVEMENTS

- | | |
|---------------------------|-----|
| • Journal Publications | 131 |
| • Conference Publications | 55 |



ACADEMIC STAFF

Professors: 20

- **Prof. S.K. Garg**, HOD, Ph.D., Operations and Supply Chain Management; Quality Engineering and Management; Automation and Industry 4.0.
- **Prof. Vipin**, Ph.D., Production Engineering
- **Prof. Sagar Maji** (On diverted capacity to DSEU), Ph.D., Thermal Engineering, IC Engine.
- **Prof. R.S Mishra**, Ph.D., Thermal Engg., Solar Energy.
- **Prof. Naveen Kumar**, Ph.D., Thermal Engineering.
- **Prof. D.S. Nagesh**, Ph.D., Automation, Robotics, CAD/CAM, Application of ANN & GA.
- **Prof. Samsher**, (On Lein) Ph.D., Power Plant, Turbo Machinery.
- **Prof. Reeta Wattal**, Ph.D., Production Engineering.
- **Prof. Bharat Bhushan Arora**, Ph.D., Thermal Engineering, Turbo Machine, Refrigeration and Air Conditioning, CFD.
- **Prof. Vikas Rastogi**, Ph.D., Machine Design.
- **Prof. Ashok Kumar Madan**, Ph.D., CAM/Automation.
- **Prof. Raj Kumar Singh**, Ph.D., Applied Mechanics.
- **Prof. Amit Pal**, Ph.D., Automobile Engineering.
- **Prof. Ramesh Chander Singh**, Ph.D., Production Engineering.
- **Prof. Rajesh Kumar**, Ph.D., Thermal engineering and Refrigeration.

- **Prof. Ranganath M.S.**, Ph.D., Production Engineering.
- **Prof. Qasim Murtaza**, Ph.D. Production Engg, Materials, Metal Coating Advance machining.
- **Prof. Rajiv Chaudhry**, Ph.D., Mechanical Engineering.
- **Prof. Atul Kumar Agrawal**, Ph.D.
- **Prof. Vijay Gautam**, Ph.D., Manufacturing

Associate Professors: 10

- **Mr. Vishva Kamal**, M.Tech., Design Engineering.
- **Mr. P.V. Ram Kumar**, ME, Thermal Engineering.
- **Mr. P. K. Jain**, ME, Production Engineering,
- **Dr. Pushendra**, **Ph.D.**, Thermal Engineering.
- **Dr. Akhilesh Arora**, Ph.D., Thermal Engineering, Refrigeration and Air conditioning.
- **Dr. Girish Kumar**, Ph.D. Reliability Engineering.
- **Dr. Pravin Kumar**, Ph.D., Industrial Management.

- **Dr. Mahendra Singh Niranjana**, Ph.D., Production Engineering.
- **Dr. Anil Kumar**, Ph.D., Post Doc., Thermal Engineering.
- **Dr. Janardan Prasad Kesri**, Ph.D., Solar Power.

Assistant Professors: 11

- **Dr. N. Yuvraj**, Ph.D., Production Engineering.
- **Dr. Manjunath K**, Ph.D., Thermal Engineering.
- **Mr. Krovvidi Srinivas**, ME, Design & Production.
- **Mr. Roop Lal**, ME, Machine Design.
- **Mr. Sanjay Kumar**, ME, Machine Design.
- **Dr. Naushad Ahmad Ansari**, Ph.D., Thermal Engineering.
- **Dr. Mohammad Zunaid**, Ph.D., Thermal Engineering.
- **Dr. Paras Kumar**, Ph.D., Machine Design.
- **Dr. Raghvendra Gautam**, Ph.D. Thermal Engineering.
- **Dr. Navitri Gupta**, Ph.D. Design.
- **Dr. Sushila Rani**, Ph.D. Design.



Faculty Visit to other Institutions for Taking Experts' Lectures and other Academic Works

- **Prof. Rastogi**, was a Member, Technical Advisory committee in 3rd International conference on computational and Experimental Methods in Mechanical engineering, held at G.L. Bajaj Institute of Technology and Management, Greater Noida on 11th -13th February, 2021.
- **Prof. Rastogi**, delivered a Keynote Lecture in AICTE sponsored 3rd International E-Conference on Cutting Edge Technological Challenges in Mechanical Engineering (CETCME-2020) on 21st -22nd August, 2020 held at NIET, Greater Noida.
- **Prof. Rastogi**, delivered an Invited talk in STTP on Robotics and Manufacturing at J.C. Bose University of science and Technology, Faridabad, held on 22nd August, 2020.
- **Prof. Rastogi**, delivered an Invited talk in STTP on Advanced Manufacturing Technologies: CNC and robotics at J.C. Bose University of science and Technology, Faridabad, held on 23rd September, 2020.
- **Prof. Rastogi**, delivered an Invited talk in STTP on Industry 4.0 at J.C. Bose University of science and Technology, Faridabad, held on 12th July, 2021.
- **Prof. Rastogi**, delivered an Invited talk in STTP on Future of Industrial Automation at Sant Longowal Institute of Engg. And Technology, held on 7th October, 2020.
- **Prof. Rastogi**, delivered an Invited talk in FDP on Industry 4.0 at Sant Longowal Institute of Engg. And Technology, held on 21st December, 2020.
- **Prof. Rastogi**, delivered an Invited talk in Faculty Development Programme on "Robotics & Automation" sponsored by All India Council for Technical Education (AICTE) at Jamia Millia Islamia on 18th June, 2021.
- **Prof. Rastogi**, delivered an Invited talk in STTP on Manufacturing Technologies at Sant Longowal Institute of Engg. And Technology, held on 30th July, 2021.
- **Prof. Rajesh Kumar** delivered a Talk on Hybrid Solar and Biomass System for Power, Cooling & Desalination at Sagar Institute of Science and Technology Gandhi Nagar Bhopal, India, 12th - 13th April, 2021.
- **Prof. Amit Pal**. was a Keynote speaker at ICFSE-2021.
- **Dr. Paras Kumar**, presented research paper in International Conference on Advances in Materials Processing & Manufacturing Applications (iCADMA 2020) , 5th - 6th November, 2020.
- Invited talk by **Prof. Naveen Kumar**, "Biofuels for EV Application: Status and Opportunity for India" FDP on Opportunity and Challenges for Electric Vehicles in the Automotive, National Institute of Technology Srinagar, 26th - 30th July, 2021 (in online mode).
- Invited talk by **Prof. Naveen Kumar**, "Renewable Jet Fuel- Potential & Challenges" 1st International Conference on Computational Intelligence & Energy Advancements (ICCIEA-2020) Vaagdevi College of Engineering, Warangal, India, 12th - 13th December, 2020. (in online mode)

- Invited talk by **Prof. Naveen Kumar**, “Green Energy- A Bridge for Sustainable Development” Green Energy Technologies: Need of Future Jointly Organised by NIT Srinagar & VCE, Warangal 10th - 14th August, 2020. (in online mode)
- Invited talk by **Prof. Naveen Kumar**, Vegetable Oils Derived Fuels-Scope and opportunities” Emerging Trends in Mechanical Engineering” (ETiME-2021) Maharishi Markandeshwar (Deemed to be University), Mullana, Haryana 24th - 29th May, 2021.
- **Dr. K Manjunath**, Delivered expert lecture on “Hybrid nanofluids in heat exchangers” in TEQUIP-III sponsored FDP on ‘Futuristic Scope of Research in Thermal Engineering’, organized by Rajasthan Technical University, Kota from 18th to 22nd February, 2021.
- **Prof. Gautam V**, Reviewer of 1. Advances in Mechanical Engineering, IMechE UK London, JIF:0.848 (Source: Journal Citation Reports®, 2018 release, a Clarivate Analytics product) SCI Indexed. 2. Journal of the Brazilian Society of Mechanical Sciences and Engineering, Springer, JIF: 1.75, 2019, SCI indexed. 3. Materials and manufacturing processes, Taylor Francis, JIF: 3.046, 2020 SCI indexed. 4. Journal of Manufacturing Processes, Elsevier, JIF:4.08, 2020, SCI indexed.
- **Prof. Rastogi V**, is an Editorial Member (*International peer-reviewed Journal*), *International Journal in Computer and Electrical Engineering*, International Association of Computer Science and Information Technology Press (IACSIT), Singapore, ISSN. 1793-8198 (online), ISSN. 1793-8163 (Print).
- **Rastogi, V.** is Reviewer in esteem journals of Elsevier, Springer, Wiley, SCS, IEEE and Inderscience Publications.

Participation in Workshop/ Conference/ Short Term Training Program

- **Dr. Anil Kumar**, Coordinator, One-week Short Term Training Program (Online) on “Role of Renewable Energy Sources in Indian Energy Security” organized by the Department of Mechanical & Production Engineering, Delhi Technological University, Delhi during 5th - 10th July, 2021.
- **Dr. Anil Kumar**, Convenor, 44th (XLIV) Indian Social Science Congress, Focal Theme New Global Technological Society, “Interdisciplinary Themic Panel: Ecological and Environment Protection Movement” Organised by Indian Social Science Academy and SATI, Vidisha from 15th - 19th March, 2021.
- **Dr. Anil Kumar**, Coordinator FDP on “Renewable Energy Sources and Future Energy Needs” “Renewable Energy Sources and Future Energy Needs” at MITS Gwalior from 15th - 19th February, 2021.
- **Dr. Anil Kumar**, Coordinator (Technical), International conference “IDEA (Innovative Development in Engineering Applications) 2021”, 8th - 10th February, 2021 at Gaya College of Engineering, Gaya at Bodhgaya (India).
- **Dr. Anil Kumar**, Organizing Secretary, International Conference on “Recent Advances in Mechanical Engineering” (RAME-2020) during 18th & 19th, September, 2020 at Department of Mechanical Engineering, Delhi Technological University, Delhi (India).

- **Dr. Anil Kumar**, participated in the 4th International Conference/Training workshop on “Energy for Sustainable Development in Africa organized by National Centre for Energy Research and Development, University of Nigeria, Nsukka in collaboration with German International Cooperation (GIZ) during 11th - 13th November, 2020.
- **Dr. Anil Kumar**, participated in one week online Faculty Development Program on “Nascent Methodologies, Challenges and Realms of Research” held from 3th - 7th October, 2020 organized by Department of Electronics and Communication Engineering, Delhi Technological University, Delhi, India.
- **Dr. Anil Kumar**, participated in one week online short term course on “Energy Management for Economic Prosperity and Ecological Stability” under QIP sponsored by AICTE, New Delhi and organized by Department of Mechanical Engineering, Sant Longowal Institute of Engineering & Technology, Longowal, Sangrur-148106, Punjab during 21st - 26th September, 2020.
- **Dr. Anil Kumar**, Patent entitled “Modified Greenhouse Dryer”, Anil Kumar and Om Prakash (2013), Application No.: 783/MUM/2013 A, Official Journal of the Patent Office Issue No. 36/2013 date 06/09/2013, International Classification F26B19/00. Patent No.: 369859, Granted on 22nd June, 2021.
- **Dr. Anil Kumar**, Patent entitled “An Edge Computing Based Automation System for Dental Services”, Dr. Aupama Kaushik, Dr. Prabhjot Kaur Sidhu, Mr. Rakshit Satija, Dr. Nitul Dutta and Dr. Anil Kumar, Application No.: 202111024736 A, Official Journal of the Patent Office Issue No. 25/2011. Application Filing Date: 03-06-2021, Publication date 18th June, 2021.
- **Dr. K Manunath**, participated in workshop webinar “Planning for online instructions” on 21st August, 2020, conducted by NITTTR, Bhopal.
- **Dr. K Manunath**, participated in the Online AICTE Recognized Faculty Development Programme on Estimating & costing of Non-conventional Energies from 10th - 14th August, 2020 (One Week) Organized by NITTTR, Kolkata.
- **Dr. M S Niranjana**, attended TEQIP-III sponsored One week short term training programme (STTP) on “Nascent methodologies, challenges and realms of research” organized by Department of Information technology, Delhi Technological University during 3rd - 7th October, 2020.
- **Dr. M S Niranjana**, attended One week short term training programme (STTP) on “Structural audit for earthquake safety” organized by Department of Civil Engineering, Delhi Technological University and National Institute of Disaster Management during 24th - 28th November, 2020.
- **Dr. M S Niranjana**, attended One week short term training programme (STTP) on “Information security in the era of deep learning: Challenge and opportunities” organized by Department of CSE, Delhi Technological University and Sponsored by ISEA Project Phase –II, Meity, Government of India during 8th - 12th February, 2021.
- **Dr. Pravin Kumar**, delivered Keynote Lecture in National Conference on Developments in Renewable Energy & Future Trends in Mechanical Engineering on Future trends in renewable energy

- in India at Mewat Engineering College, Nuh, Haryana.
- **Dr. Pravin Kumar**, contributed as a Chaired Technical Session in National Conference on Developments in Renewable Energy & Future Trends in Mechanical Engineering at Mewat Engineering College, Nuh, Haryana.
 - **Dr. Pravin Kumar**, contributed as a Technical Session Chair in The 2nd International Conference on Future Learning Aspects of Mechanical Engineering, 5th - 7th August, 2020 at Amity School of Engineering & Technology.
 - **Dr. Pravin Kumar**, contributed as a Technical Session Chair on Technology, Strategy, and New Realities in FORE International Business Conference 2020, 27th - 28th November, 2020 at FORE School of Management, New Delhi.
 - **Pushendra Singh**, participated in International Summit on Quality Indices in Higher Education - 2020, held during 6th - 7th November, 2020 at Delhi Technological University, Delhi.
 - **Pushendra Singh**, participated in International Conference on Recent Advances In Mechanical Engineering”, (RAME-2020) at DTU during 18th - 19th September, 2020.
 - **Pushendra Singh**, participated in the 1st International Conference on Energy, Materials Sciences and Mechanical Engineering (EMSME - 2020) organized by Department of Mechanical Engineering, National Institute of Technology Delhi, Delhi, India held during 30th October - 01st November, 2020.
 - **Pushendra Singh**, participated in Online Panel Discussion on “Making Mentoring Relevant: NEP 2020 Perspective” Conducted by NITTTTR Bhopal, Chandigarh, Chennai, Kolkata on 21st September, 2020.
 - **Pushendra Singh**, participated in One Week Online STTP on “MOODLE Learning Management System” conducted by Department of Mechanical Engineering and Department of Computer Science and Engineering, NIT Warangal, from 4th - 8th January, 2021.
 - **Pushendra Singh**, attended and successfully completed Two Week Online FDP on Indian Knowledge Systems in Contemporary Education & Practices 5th - 19th November, 2020, Initiative of Department of Contemplative and Behavioral Sciences (DCBS) Sri Sri University, Cuttack (Odisha) in Collaboration with Centre for Professional Development in Higher Education (CPDHE) UGC-HRDC, Delhi University.
 - **Pushendra Singh**, participated in National Productivity Council webinar on “Concept of Environmental Impact Assessment” held on 14th May, 2021.
 - **Pushendra Singh**, participated in National Productivity Council webinar on “Environment Laws as Enabler to balance Environment Considerations and Economic Growth” held on 15th February, 2021
 - **Pushendra Singh**, participated in the Webinar On “Survive to Thrive: Resilient Entrepreneur” Held On" 6th October, 2020 organized by NPC.
 - **Pushendra Singh**, participated in the Webinar On “Disciplinary and Vigilance

Cases” Held On “18 November, 2020” organized by NPC.

- **Roop Lal**, participated in AICTE Sponsored One Week Online Short Term Training Programme on “Advances in Manufacturing Systems” organized by Department of Mechanical Engineering, Madhav Institute of Technology & Science, Gwalior from 25th - 30th June, 2021
- **Roop Lal**, attended Online FDP on “Green Technology in Manufacturing: Forecasting the Future of Mankind and Industry, 5th – 9th July, 2021, Under AICTE – ATAL Organized by Department of Production & Industrial Engineering, PEC Chandigarh
- **Roop Lal**, participated in Two Week AICTE sponsored QIP STC on “Quality Management & Business Process Reengineering” Organized via online mode during 7th - 18th December, 2020, by the Department of Mechanical and Industrial Engineering, Indian Institute of Technology Roorkee.
- **Roop Lal**, attended One week online Short Term Training Programme on “Trictiral Audit for Earthquake Safety” Jointly Oraganiged byNational Institute of Disaster Management, Ministry of Home Affairs, Govt. of India. Delhi and Department of Civil Engineering, Delhi Technological University, Delhi during 24th – 28th November, 2020.
- **Roop Lal**, attended One week On line STC on “Advanced Energy Materials from 12th - 16th October, 2020, Organized by Department of Physics, Dr. B R Ambedkar National Institute of Technology, Jalandhar
- **Roop Lal**, attended TEQIP – III Sponsored One week On line FDP on “ Material Characterization Techniques” held from 24th - 28th August, 2020, Oraganized by the Institute Instrumentation Centre, Dr. B R Ambedkar National Institute of Technology, Jalandhar.
- **Sushila Rani**, attended one day workshop on “Innovation and Startup Ecosystem Enablers from Region/ State/ National Level” held on 23rd June, 2021 organized by Department of Electronics and Communication Engineering, Delhi Technological University, Delhi.
- **Sushila Rani**, attended one day Workshop on Prototype Validation- Converting Prototype into a Start-up held on 26th June, 2021 by department of Information Technology, DTU, Delhi.
- **Sushila Rani**, attended One-month Industrial Training on Automation Technology in FESTO India Private Limited in the month of July 2020.
- **Sushila Rani**, attended TEQIP III sponsored E-Training Program/ Short-term course on “Atomistic Modelling of Solids: Theory and Applications” in the Department of Mechanical Engineering from 21st-25th December, 2020 at IIT Indore.
- **Sushila Rani**, attended one week workshop on Modelling and Simulation in Design and Manufacturing (MSDM-2020) held on 5-9th October, 2020 at Maulana Azad National Institute of Technology, Bhopal. India.
- **Sushila Rani**, attended one-week AICTE-ISTE sponsored Induction/Refresher Program on “Sustainable Product Design and Manufacturing (Phase II) held on April 15-21, 2021 at Shri Mata Vaishno Devi University, India.

- **Sushila Rani**, attended one-week AICTE-ISTE sponsored Induction/Refresher Program on “Sustainable Product Design and Manufacturing (Phase III) held on May 21 -27, 2021 at Shri Mata Vaishno Devi University, India.
- **Zunaid, M.** attended one-day E-Workshop on “Innovation and Startup Ecosystem Enablers from Region/ State/ National Level” held on June 23, 2021 organized by Department of Electronics & Communication Engineering, Delhi Technological University, Delhi, India.
- **Zunaid, M.** worked as joint organizing secretary in 2nd International Conference on Recent Advances in Mechanical Engineering held on September 18-19, 2020.
- **Zunaid, M.** worked as the treasurer in 2nd International Conference on Recent Advances in Mechanical Engineering held on September 18-19, 2020.
- **Zunaid, M.** worked as the reviewer in 2nd International Conference on Recent Advances in Mechanical Engineering held on September 18-19, 2020.
- **Zunaid, M.** worked as the session coordinator in technical session 12 (RE-5) in 2nd International Conference on Recent Advances in Mechanical Engineering held on September 18-19, 2020.
- **Zunaid, M.** contributed as a Session Chair in Technical Session I & II Track A/B/C/D for “International Conference of Advance Research and Innovation (ICARI-2021)” organized by “Meerut Institute of Engineering and Technology, Meerut (Affiliated to Dr. Abdul Kalam Technical University, Lucknow)” with International Journal of Advance Research and Innovation (www.ijari.org), held online at MIET, Meerut, India, January 30th 2021.
- **Zunaid, M.** presented research paper, “A Sensor Based Assessment of Ignition Delay for Pure Diesel and Biodiesel Blends in an Isochoric Combustion Box” in 2nd International Conference on Recent Advances in Mechanical Engineering (RAME- 2020), organised by Department of Mechanical & Production Engineering, Centre for Energy and Environment, Delhi Technological University, New Delhi, India during September 18-19, 2020.
- **Zunaid, M.** presented research paper, “Mathematical Analysis of a Spiral Passive Micromixer” in 2nd International Conference on Recent Advances in Mechanical Engineering (RAME- 2020), organised by Department of Mechanical & Production Engineering, Centre for Energy and Environment, Delhi Technological University, New Delhi, India during September 18-19, 2020.
- **Zunaid, M.** presented research paper, “Numerical Analysis of Inclined Jet Micro Channel Heat Sink Using Nanofluids” in 2nd International Conference on Recent Advances in Mechanical Engineering (RAME- 2020), is being organised by Department of Mechanical & Production Engineering, Centre for Energy and Environment, Delhi Technological University, New Delhi, India during September 18-19, 2020.
- **Zunaid, M.** presented research paper, “Nozzle Design for Intake Manifold for KTM 500 EXC Engine” in 2nd International Conference on Recent Advances in Mechanical Engineering (RAME- 2020), is being organized by Department of

Mechanical & Production Engineering, Centre for Energy and Environment, Delhi Technological University, New Delhi, India during September 18-19, 2020.

- **Zunaid, M.** presented research paper entitled “Fabrication of Rapid Compression Machine with Variable Compression Ratio -A Review” for “International Conference of Advance Research and Innovation (ICARI-2021)” organized by “Meerut Institute of Engineering and Technology, Meerut (Affiliated to Dr. Abdul Kalam Technical University, Lucknow)” with International Journal of Advance Research and Innovation (www.ijari.org), held online at MIET, Meerut, India, January 30th 2021.
- **Zunaid, M.** presented research paper entitled “Numerical investigation of mixing quality in offset inlets 3-D T mixer with bend mixing channel” for “International Conference of Advance Research and Innovation (ICARI-2021)” organized by “Meerut Institute of Engineering and Technology, Meerut (Affiliated to Dr. Abdul Kalam Technical University, Lucknow)” with International Journal of Advance Research and Innovation (www.ijari.org), held online at MIET, Meerut, India, January 30th 2021.
- **Zunaid, M.** worked as the coordinator in TEQIP-III one-day online seminar on ‘NEP-20 theme Vocational Education & Technology’, organized by Department of Mechanical Engineering, Delhi Technological University, Delhi, on February 23, 2021.
- **Zunaid, M.** as a coordinator conducted online short term course on ‘Role of Renewable Energy Sources in Indian Energy Security (RORES-2021)’

from July 5 - 9, 2021, organized by Department of Mechanical, Automobile and Production & Industrial Engineering, Delhi Technological University, Delhi.

- **Zunaid, M.** attended one-week online faculty development program in association with AICTE on ‘New & Emerging Technology’, organized by ARK Info Solutions Pvt. Ltd. using simulation tools provided by technology partner Ansys software Pvt. Ltd. from 28/06/2021 to 02/07/2021.
- **Zunaid, M.** attended one-week online faculty development program on ‘Future Aspects in Design, Manufacturing & Safety’, organized by Department of Mechanical Engineering, Rustamji Institute of Technology, Border Security Force Academy, Tekanpur, Gwalior, Madhya Pradesh, from 14th - 18th June 2021.
- **Zunaid, M.** attended one-week online faculty development program on “Ethics and Values in Technical Education in Context of National Education Policy-2020” organized by Centre for Value Based Education, Delhi Technological University, Delhi during April 15th -19th, 2021.

Completed and ongoing Sponsored Research Projects

List of Ongoing Projects

- **SAVONIUS WIND TURBINE (June 2021- Present)** The Students of Centre for Advanced Studies and Research in Automotive Engineering (CASRAE) are developing a wind turbine from scratch. On an existing savonius wind turbine, a novel reorienting blade mechanism is designed and implemented. The proposed design enhanced the power

coefficient of the Turbine and ensures the Savonius turbine's safety by changing the blade orientation according to the wind conditions. During simulations, a maximum increase of 9.5% and 7.6% in the power coefficient is obtained for blades at 10° and 20° positions.

- **Quaternary Biodiesel blend-** A team of CASRAE students is currently working on preparing a stabilized quaternary blend biodiesel under the guidance of Prof. Naveen Kumar. The blend was tested for various engine performance and emissions characteristics and the collected data was used for prediction using Machine learning for optimizing the engine performance and emissions parameters.

Completed Projects:

- A **Super Critical trans-esterification Reactor** (as per DTU design) has been developed at the centre. This is the first reactor in India, which is working under supercritical conditions. It can process a very high FFA feedstock in 5-10 minutes with a purity of more than 98%.

Research Excellence Award

- Two Ph.D. scholars namely: Mukul Tomar and Ankit Sonthalia were conferred the research excellence award in a university ceremony held on 18th February, 2021. The details of the papers are given as under: **Category 2 (Prize money ₹ 100,000/-)**.
- **Naveen Kumar**, Ankit Sonthalia, Rashi Koul, "Optimization of the process parameters for hydrotreating used cooking oil by the Taguchi method and Fuzzy logic", ASME Journal of Energy Resources Technology, doi: 10.1115/1.4047405, (Publisher – ASME;

SCI Indexed) (Category 2) Category 3 (Prize money ₹ 50,000/-).

- Mukul Tomar, Amit Jain, Prashant Chandra Pujari, Hansham Dewal, **Naveen Kumar**, "Potentials of waste plastic pyrolysis oil as an extender fuel for diesel engine" Arabian Journal of Geosciences, Vol. 13, Article No. 504, 2020 <https://link.springer.com/article/10.1007/s12517-020-05574-6> (Publisher Springer, SCIE Indexed) (Category 3).
- Mukul Tomar, **Naveen Kumar**, "Effect of multi-walled carbon nanotubes and alumina nano-additives in a light duty diesel engine fuelled with schleichera oleosa biodiesel blends" Sustainable Energy Technologies and Assessments, Vol. 42, <https://www.sciencedirect.com/science/article/abs/pii/S2213138820312601> (Publisher Elsevier, SCI Indexed) (Category 3).
- **Pushendra Singh**, COMMENDEBLE RESEARCH AWARD 2020 for "An Overview of Mechanical Properties and Form Error in Rapid Prototyping"; Nagendra Kumar Maurya, Vikas Rastogi, Pushendra Singh; CIRP; journal of manufacturing science and technology; 2020; ISSN: 1755-5817; <https://doi.org/10.1016/j.cirpj.2020.02.003>; SCIE; IF 2.991.
- **Pushendra Singh**, COMMENDEBLE RESEARCH AWARD 2020 for "Optimization of protein extraction from detoxified Jatropha seed cake using response surface methodology and amino acid analysis"; Ahluwalia, S., Bidlan, R., Singh, P. and Sharma, J. G.; International Journal of Environmental Science and Technology, (Springer Berlin Heidelberg); Print 2020; ISSN 1735-1472; <https://doi.org/10.1007/s13762-019-02340-4>; SCIE; IF 2.540.

- **Pushendra Singh**, BEST PAPER AWARD for the paper “A Study of Thermal Conductivity of NiCrFeSi Based Ceramic Composite Coating” authored by Rahul Yadav, Rahul Kumar Sah, Pulkit Mann, Deepak Kumar and Pushendra Singh in the International Conference on Industrial and Manufacturing Systems CIMS-2020 9th - 11th October, 2020 Dr. B. R. Ambedkar National Institute of Technology, Jalandhar.

Organization of Webinar/Conferences and Training Programs

- **Prof. Naveen Kumar** organized a Webinar on “Advances in Rheo-Tribometer” under CASRAE DTU on 5th July, 2021, at 11:30 am.
- **Prof. Naveen Kumar** conducted a quiz on Sustainable Development on 15th March, 2021 with the Institution of Mechanical Engineers (IMechE) DTU Chapter.
- Centre for Advanced Studies and Research in Automotive Engineering, DTU in association with IMechE DTU Chapter organized an online workshop on “Sustainable development - India’s preparedness vis-à-vis Global Initiatives” on Monday, 1 March, 2021, from 10.00 AM onwards.

Students Achievements

- **Dr. Mukul Tomar** who finished his Ph.D. with Prof. Naveen Kumar in June, 2021, get a Post-Doc position in University of Illinois Chicago, USA. It is a very distinct position for a research scholar of DTU. He is currently working on a USA government project.
- **Prashant Chandra Pujari**, who was Department Rank 1 (DR-1) of Mechanical Engineering Department in 2021 and also an active member of CASRAE, secured admission in Post Graduate course in Imperial College London, UK with a full scholarship.
- **Mukesh Yadav**, who was also an active member of CASRAE secured admission in the Post Graduate course in University of California, Los Angeles.
- **Shrishti Mishra**, who was one of the brightest students of CASRAE secured admission in the Post Graduate course in Robosys Engineering in RWTH Aachen University, Germany.

4.15 Department of Software Engineering

Prof. Ruchika Malhotra, HoD



ACADEMIC PROGRAMMES

- B.Tech (Software Engineering)
Intake: 152
Students Admitted: 151
- M.Tech (Software Engineering)
Intake: 25+5
Students Admitted: 26+01 (SPN)

ACHIEVEMENTS

- | | |
|---------------------------|---|
| • Journal Publications | 5 |
| • Conference Publications | 1 |

SALIENT FEATURES

The Department of Software Engineering is dedicated to produce high quality graduates and skilled software engineers/professionals who can develop high quality and cost-effective software systems. The Department of Software Engineering was introduced in March 2021. All the software engineering programs are well designed keeping in view the industry demands. The programs are designed to build the analytical and practical capabilities of students in the design and development of the software and lays emphasis on following well defined and systematic approach for meeting the growing demands and requirements of the software industry. The curriculum is regularly updated in accordance with the latest trends, research and best practices in the software industry and academia.

Professors: 01

- **Prof. (Dr.) Ruchika Malhotra**, Ph.D, Post Doc (Indiana University Purdue University, USA), Machine Learning and Predictive Modeling, Software Testing and Quality, Empirical Software Engineering, Search-based Software Engineering.

Assistant Professors: 09

- **Dr. Abhilasha Sharma**, B.Tech, M.Tech, Ph.D., Software Engineering, Software Testing, DBMS, Web Technology, Web Security.
- **Dr. Divyashikha Sethia**, B.Tech, M.Tech, Ph.D., Distributed Systems, Computer Networks, Algorithms, Mobile Computing, Health, Cryptography.
- **Mr. Sanjay Patidar**, BE, ME., Pursuing PhD, IOT data mining, security, Stream Data mining, Machine Learning, IOT Smart Application, Data science, Theory of Computation.
- **Ms. Sonika Dahiya**, BE, M.Tech., Pursuing PhD, Algorithms and Data Mining, Data Structures, Theory of Computation.
- **Mr. Rahul**, B.Tech, M.Tech, Pursuing Ph.D., Database, Data Mining, Machine Learning, Social Networks.
- **Shweta Meena**, B.Tech(IT), M.Tech(SWE), Pursuing Ph.D., Software Engineering, Software Testing, Software Quality and Metrics, Empirical Software Engineering
- **Mr. Ram Murti Rawat** (Contractual), M.Tech, Pursuing Ph.D., Microelectronics Engineering.
- **Geetanjali Garg** (Contractual), B.Tech. (CSE) , M.E.(CTA), PhD, Web Mining.
- **Priya Singh**, B.Tech , M.Tech , Ph.D (Pursuing), Deep Learning, Machine Learning, Predictive Modelling, Software Engineering, Algorithms and Programming, Cloud Native, 5G Core Network.

Achievements of the Department : (For Example. MOU, International Seminar or any appropriate achievement by faculty members)

- Samsung has a Lab development in process for a duration of 3 years starting 2019.
- Efkon India Private Limited has signed an MoU in 2020 for 4 years for Setting up Intelligent Transportation System facility at DTU for Research and Innovation.

Detail of Patents filed/published/awarded during the current year

- Sanjay Patidar, Rajni Jindal, Sumit Kumar Sharma and Upendra Singh titled patent Smart Autonomous Weed Detector and Removal on 21st August, 2020.
- Prof. Ashish Verma, Aruna Tiwari, Sanjay Patidar, Neetesh Kumar, Upendra Singh filed a patent titled Road Asset Management System in Dec, 2020.

Teachers provided with financial support to attend Conferences / Seminars /Symposia /Workshops/ Short Term Course/Guest Lecture/ GIAN/TEQIP etc.

- Sonika Dahiya and Rahul received ₹ 600 for attending FDP on “Advanced Pedagogical Techniques” by Teaching Learning Centre, Ramanujan College, University of Delhi for two weeks from 15th December 2020 and ₹ 1000 for Refresher course in Research Methodology by Devi Ahilya Vishwavidyalaya, Indore.
- Rahul was received amount of ₹ 9500 and 7500 for attending Springer 5th International Conference on Inventive Systems and Control (ICISC 2021) by JCT

College of Engineering and Technology and IEEE 4th International Conference on I-SMAC (IOT in Social Mobile, Analytics and Cloud) by SCAD Institute of Technology respectively.

- Shweta Meena and Rahul received amount of ₹ 10,000 each for attending AICTE 8 Online Modules by NITTT.

Detail of teachers attending professional development Programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the current year

- Prof. Ruchika Malhotra attended Online Faculty Development Program (FDP) on Nascent Methodologies, Challenges and Realms of Research organized by DTU from 03/10/2020 – 07/10/2020.
- Abhilasha Sharma attended Online Short-Term Training Program on Information Security in the era of Deep Learning by CSE Deptt., DTU from 08/02/2021 - 12/02/2021 and FDP cum Workshop on Internet of Things & its related Areas By CSE deptt., MAIT in association with IT deptt., MAIT & IEEE ComSoc Delhi Chapter from 16/08/21 - 27/08/21.
- Sanjay Patidar and Sonika Dahiya attended Refresher course in Research Methodology, FDP on “Advanced Pedagogical Techniques” and Induction/Orientation programme for “Faculty in Universities/ Colleges/ Institutes of Higher Education” by Devi Ahilya Vishwavidyalaya, Indore , Teaching Learning Centre, Ramanujan College, University of Delhi, Delhi, and Teaching Learning Centre, Ramanujan College, University of Delhi, Delhi on 15/12/2020

– 28/12/2020, 28/10/2020 – 05/11/2020
and 26/06/2020-24/07/2020
respectively.

Visit of faculty to other institution for taking Experts' Lectures/other academic work

- Prof. Ruchika Malhotra worked as a Track Co-Chair in 12th Symposium on Search Based Software Engineering (SSBSE 2020) webinars held on-line on 7th and 8th October 2020. She was also the keynote speaker in Widya Kartika University's National University Seminar on Post Covid-19 Enterprise: Business, Engineering and Education Changes and Opportunities held on 29th August 2020.
- Prof. Ruchika Malhotra gave an Expert talk at the five days Short Term Course on organized by Department of Physics, Instrumentation and Control Engineering & Industrial and Production Engineering, Dr. B R Ambedkar National Institute of Technology Jalandhar on the topic Machine Learning: Theory and Applications (MLTA 2020) on 12th September 2020 and she also delivered an Expert Lecture in the ACM Summer Workshop-cum-Internship 2020 on Empirical Research in Software Engineering from 15th June to 31st July 2020.

Grants for research projects sponsored by the non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution during the current year (INR in Lakhs)

- Dr. Ruchika Malhotra received funds from Delhi Technological University in the year 2019 a sum of ₹ 4.5 Lakh for a project with a duration of 2 years. She also received a non-government funding of ₹ 32 Lakh for a duration of 4 years in the year 2020.
- Dr. Rajni Jindal, Dr. Divyashkha Sethia were provided with Lab infrastructure from Samsung research India for a project with duration of 3 years in the year 2019.

Detail of student progression to higher education (previous graduating batch) (the current year)

- Surendrabikram Thapa Program graduated from and joined Virginia Tech, USA for MS in Computer Science.
- Sushruti Mishra graduated from B. Tech Software Engineering to join New York University for MS in Computer Science.

4.16 University School of Management and Entrepreneurship

Prof. Amit Mookerjee, HoD



ACADEMIC PROGRAMMES

- B.A. (H) (Economics)
Intake: 180+18 (FN)
Students Admitted: 152
- BBA
Intake: 180+18 (FN)
Students Admitted: 182
- MBA
Intake: 120
Students Admitted: 95
- MBA-Business Analytics
Intake: 38
Students Admitted: 29
- MBA-Family Business & Entrepreneurship
Intake: 40
Students Admitted: 8
- MBA-Innovation, Entrepreneurship and Venture Development
Intake: 40
Students Admitted: 15
- Ph.D. Research Scholars: 0

LABORATORIES

The department currently has two computer laboratories equipped with the latest version of different software platforms and systems.

There has been active involvement of students and faculty in the various professional activities and student events. The department has 18 student clubs built around professional, cultural, social and sports related interests. Guest lectures, events, visits to industries and trade fairs, all have led to an all-round exposure of students at USME to the rapidly changing economic and industrial scenario.

ACHIEVEMENTS

- Journal Publications 3

SALIENT FEATURES

The East Delhi Campus of the DTU, was inaugurated in August 2017, by the Hon. Chief Minister of Delhi Shri Arvind Kejriwal, and the Hon. Deputy Chief Minister of Delhi, Shri Manish Sisodia, in the august presence of Hon. Vice Chancellor, Prof. Yogesh Singh, Hon. PVC, Prof. Anu Singh Lather and Prof. S.K. Garg, and a gathering of esteemed members of the Government of Delhi, respected academics and others. The East Delhi Campus

SALIENT FEATURES

of DTU is functional since 2017-18 academic session, offering both under-graduate and postgraduate programs, and is situated at Vivek Vihar Phase II, New Delhi.

In alignment with the vision and mission of the DTU, this campus endeavours to provide quality education, research and innovation in the emerging areas of management relevant to industry and society. The University School of Management and Entrepreneurship was initiated with the view to fulfill this mission and the able leadership of the PVC II, Prof. Anu Singh Lather, as the founding head of East Delhi Campus, DTU has helped create a multidisciplinary approach towards entrepreneurship, embedded in a management school, which would be able to leverage the rich and esteemed heritage of the DTU in the world of technology and best practices in higher education. The prime focus of the USME was on the introduction of new UG and PG programs in the emerging areas of management such as business analytics, entrepreneurship and family business, public policy and financial Markets etc. along with traditional undergraduate and postgraduate management programs. It aims to foster the educational ethos in its programs, of employability through industry relevant programs, on focussed domains of knowledge creation and innovation, through research and development. It looks to harness and leverage Techno - entrepreneurship and knowledge enterprise development through the centres of Entrepreneurship Development and Organizational Development.

From the 2017-18 academic year, it has offered Programs in Bachelor of Business Administration (B.B.A.), Bachelor of Arts (Hons.) in Economics (BAE) and Master of Business Administration (M.B.A.). The second PG program, M.B.A. Business Analytics, was launched in the academic year 2018-19. Two more programs M.B.A. Family Business and Entrepreneurship and M.B.A-Innovation, Entrepreneurship and Venture Development (IEV) in the academic year 2019-20. This was in line with the mission of the USME to offer cutting edge programs in emerging and critical emerging areas of industry and societal needs for talent.

The school has designed management programs to develop the capability amongst students for managing complex situations and relationships. Amongst the various skills of management courses, some of them focus on strengthening management principles, presentation, problem solving, team building, decision-making and marketing. Hence, management programs running in the school will help the country in producing talented and skilled workforce.

The BAE and BBA programs have an intake of 180 students each (three sections).

The department currently has two computer laboratories equipped with the latest version of different software platforms and systems.

There has been active involvement of students and faculty in the various professional activities and student events. The department has 18 student clubs built around professional, cultural, social and sports related interests. Guest lectures, events, visits to industries and trade fairs, all have led to an all-round exposure of students at USME to the rapidly changing economic and industrial scenario.



ACADEMIC STAFF

Professors: 02

- **Prof. K.V. Bhanu Murthy**, MA, Ph.D., Economics.
- **Prof. Amit Mookerjee**, MBA, Ph.D., Marketing.

Assistant Professors : 18

- **Ms. Pallavi Sethi**, M. Phil, Accounting And Finance.
- **Mr. Ratnam Mishra**, Ph.D., Micro Economics, Economics Of Education, Indian Economy.
- **Mr. Anurag Chaturvedi**, MBA, Finance, FRM
- **Mr. Vikas Gupta**, MBA, Ph.D., Knowledge Management.
- **Ms. Nidhi Maheshwari**, MBA, LLB, Ph.D., HR, Leadership.
- **Mr. Puneet Arora**, MA.
- **Ms. Priya Malhotra**, MBA, Financial Markets Investment Management Financial Management.
- **Ms. Harleen Kaur**, MBA, Marketing Management, Consumer Psychology, Brand Management.
- **Ms. Varsha Sehgal**, MBA.
- **Dr. Dr. Deepti Aggrawal**, Ph.D., Optimization Techniques, Operations Research.
- **Dr. Gaganmeet Kaur Awal**, Ph.D., Machine Learning, Data Mining.
- **Dr. Kusum Lata**, Ph.D., Machine Learning, Data Mining, Software Quality And Metrics.
- **Dr. Aakanksha Kaushik**, M.Phil (Economics), Public Finance, Econometrics.
- **Dr. Rajesh Sharma**, Ph.D., Health Economics.
- **Dr. Naval Garg**, Ph.D., Workplace Spirituality.
- **Dr. Jagvinder Singh**, Ph.D., Operations Research Statistics.
- **Dr. Virender Kumar**, M.Phil, Macroeconomics, Time Series Econometrics.
- **Ms. Nidhi Maheshwari**, Ph.D., HR.

Detail of teachers attending professional development Programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the current year

- Dr. Vikas Gupta attended professional development program on Sustainable Development: Implications for Management Research and Practice organized by DSM, DTU from 1st to 5th December and also on Indian Knowledge Systems in Contemporary Education & Practices organized by DCBS, Sri Sri University in Collaboration with Centre for Professional Development in Higher Education (CPDHE), UGC-HRDC, Delhi University from 5th to 19th November 2020.
- Dr. Kusum Lata attended One-week online ATAL advanced FDP on Machine Learning and Computer Vision organized by Vignans Foundations for Science and Technology and Research University held from 5th July 2021 to 9th July 2021 and One week advanced FDP on Decision Sciences by Institute of Road and Transport Technology.
- Dr. Gaganmeet Kaur Awal attended Faculty Induction Program organized

by UGC- HRDC, Jawaharlal Nehru University from 5th October 2020 to 31st October 2020 and FDP on Technology management organized by Delhi Technological University under AICTE ATAL Academy from 24th August 2020 to 28th August 2020.

Visit of faculty to other institution for taking Experts' Lectures/other academic work

- Dr. Vikas Gupta chaired the session for International Conference of Advance Research and Innovation (ICARI-2021) held in Meerut Institute of Engineering and Technology, Meerut, India held on 30th January 2021 on the topic. He also acted as a resource person from DSM DTU in the session on Sustainable Development: Implications for Management Research and Practice from 1st to 5th December 2020 and as a subject resource person for in virtual workshop Virtual Workshop on Collating Management Resources for Teachers in Higher Education organized by National Resource Centre for Education Institute, NIEPA.
- Dr. Kusum Lata was the resource person in association rule mining held in Sri Guru Gobind Singh College of Commerce, University of Delhi on 23rd March 2021.

5 Centres and Other Units

5.1 DTU Innovation and Incubation Foundation (DTU IIF)

DTU Innovation and Incubation Foundation (DTU IIF) was established as per the policy guidelines of Govt. of NCT of Delhi on summary recommendations for setting Incubators in Higher Education Institutions in Delhi by a working group established by the Government of National Capital Territory of Delhi, under order No.F.75(73)/2015-16/Incubation/ADPL/321-330 dated 5/6/15 to pursue the following core objectives as given in the guidelines by the Government of NCT of Delhi:

- To create a culture of entrepreneurship, Start-ups, and, and Intellectual Property Creation that can to value creation, jobs and employment and do social and economic good.
- To facilitate creation of incubation centres that offer incubation infrastructure-space, computing resources, connectivity, common tools; and environment for co-working, collaboration and innovation.
- Create entrepreneurship challenges based upon existing problems to foster Innovation.

DTU INNOVATION AND INCUBATION FOUNDATION (DTU IIF) is promoted and established by Delhi Technological University under Section 8, (License Number 107658, CIN of the company is U74999DL2016NPL305531), as per Companies Act of Govt. of India, as Incubation Centre i.e., Technology Business Incubator (TBI) of Delhi Technological University (DTU). The Vision and Mission of DTU-IIF:

Organisation Structure

Prof. Yogesh Singh Vice Chancellor, Delhi University	Chairman
Prof. M. N. Doja Director, IIT Sonapat	Director
Prof. S. K. Garg HoD, Mechanical Engineering	Director
Prof. Anu Singh Lather Vice Chancellor	Director
Prof. Ashutosh Trivedi Dean - IRD	Director
Prof. Samsher Vice Chancellor, HBTU, Kanpur	Director
Dr. R. K. Shukla Head - Library	Director
Dr. Girish Kumar	CEO
Dr. Rajiv Dwivedi	Coordinator
Sh. Sanjay Patidar	Coordinator
Dr. Sachin Taran	Coordinator

VISION

To create the Entrepreneurial Ecosystem by Innovation to provide enhanced value propositions to the customers and create wealth and employment for everyone.

MISSION

Our mission is to provide incubation and business support services to Start-ups/ Companies of DTU IIF so that they can grow and prosper.

Details of Currently Incubating Startup Companies at DTU-IIF

1. **FAUCET LABS PVT. LTD.**
(CIN: U72900DL2019PTC347110):

Cypherock provides security storage solutions for blockchain based digital assets and private keys. It is developing

a universally designed hardware wallet to enable seamless and secure mobile blockchain transactions. The first product is a hardware wallet portable to the mobile case or a plug & play case in order to mitigate both PC & mobile software wallets' security risks. It will have a touchscreen, serve dual purpose (both desktop & mobile), be portable to other devices, secured by biometric and user set PIN, support diversity of digital assets and be a cold storage.

2. **ZEFI LABS PVT. LTD.**
(CIN: U74999DL2017PTC323170)
Maximum water coming out of the tap with surface. Hence, we came with Dropp, an atomizer faucet designed to fit with any domestic tap which converts water coming out of the tap into millions of tiny droplets, creating a heavy mist, shooting out of the tap. This increases the surface area of water drastically and makes the efficient use of water while washing. But sometimes, higher flow rate is required, for that we have normal flow mode also. Normal flow mode also saves up to 75% water. Dropp serves to the places with high water consumption and water scarcity.
3. **AMPEREPLUS PVT. LTD. (CIN: U74999DL2016PTC301297)**
Ampere provides turnkey EPC/INC solution for Solar Power Plants for industrial and commercial market. We also provide data-based monitoring and energy saving technology to monitor devices like street lights, Solar Powered internet routers with motion sensors, etc.
4. **TRENTION TECHNOLOGIES PVT. LTD. (CIN: U74999BR2017PTC036114)**
This plan is based on analysis of data collected from the MVP of EazyPG run

actively in last 3 years. The features/products, value proposition, revenue model, go-to-market strategies, etc are factually based on perspectives/feedbacks and insights we gained from 5000 users we interacted and delivered the services personally. We looked for problems they faced, their experiences/feedback to our solutions, their perspective and approach to it and also any pattern & preferences behind their use of our products.

5. **IOTERACTION TECHNOLOGIES SERVICES PVT. LTD.**
(CIN: U72200DL2017PTC327289)
Interaction Technologies Services Private Limited is involved in Software publishing, consultancy and supply. Software publishing includes production, supply and documentation of ready-made (non-customized) software, operating systems software, business & other applications software, computer games software for all platforms. Custom software also includes made-to-order software based on orders from specific users. It is also involved in the development of media based IoT products. It assists companies in interactive advertising and marketing. Lastly, it develops data analytics software and provides consulting based on collected data points and also an ERP solution for Indian logistics and supply chain industry.
6. **PROXIMA ADVERTISING SOLUTION PRIVATE LIMITED (CIN: U74999DL2018PTC330601)**
We describe our company as an advertising agency which is trying to cut down on the cost of advertising for small businesses. Websites have been a popular channel of advertising since the internet, but we are trying to

convert the entire internet as a channel for advertising. By providing free Wi-Fi to users we want to make internet a human right that's why we keep it free and, in the process, bring down the cost of advertising to ₹2 per ad view.

7. SUPREME TESTING LAB & FORENSIC EVIDENCE PROTECTION TECHNOLOGY PRIVATE LIMITED (CIN: U74999DL2018PTC329803)

Study various types of crime exhibit their shape and size and design containers, accordingly to the shape of various types of exhibit Including, Computer Forensics, Charred Documents and properly Maintenance of Chain of Custody. Study of properties of material to be used for making containers for Solids, Liquid, and Gases. Commercialization of the Design and production of the various type of Containers and Sealing Devices.

8. PROJEXELTECHNOLOGIESPVT.LTD. (CIN: U72900HR2019PTC080008)

Our product uses emerging technologies in terms of cell chemistry, IC's, RF transmitter, receivers and other electronics components. Which are in the middle of S curve of development and will see step improvements in future. This will help us provide better products as we proceed.

9. LEGASCI CREATIONS PVT. LTD. (CIN: U72900DL2019PTC350187)

We have built our start-up to revolutionize the way people live their daily lives. Our goal is to make the houses we live in intelligent, and more connected to us. The more intelligent our houses are, the less monotonous tasks we have to perform. People wouldn't have to wonder whether they left their iron switches on before leaving the house.

People don't have to wake up at 5 a.m. in the mornings to switch on their water pumps. Neither would they have to wait for their rooms to cool down reaching home after a busy day of work, because now, it will be done before they reach. This is what our startup is about, to make our houses a part of us, just like our limbs and muscles, over which, we have complete control.

10. OBLIVION TECHNOLOGIES PVT. LTD. (CIN: U72900HR2019PTC081511)

We have utilized this new technology in the service of the students. We have developed a complete marketplace dedicated specifically to the needs of the students. The current education industry is worth crores of rupees. This industry can be efficiently scaled into an online marketplace. Every transaction inside a campus can be completed without the need of shopkeepers who prey on the money of students. We have done this by being efficient and cost-effective at the same time with the use of latest technology.

11. JXR TECHNOLOGIES PVT. LTD. (CIN: U74999DL2019PTC344603)

We launched the 2 versions of water pump controller into to market which are superior in terms of technology and lower in cost. Two versions are for Submersible & Municipal Corporation water lines. Water pump controller is a device that stops the overflowing water from tanks or fill the tank automatically at residential places.

12. HANUSHA NETWORKS PVT. LTD. (CIN: U74999UP2018PTC101537)

SportsApp is a Sports Professionals Network including sports academies and sponsors, In this athlete can connect with other athletes, coaches, sports

academies, and sponsors and they will get regular updates of “Events, Job & Admission, Scholarships & Sponsorship opportunities”. The vision is to aid the talented athletes with all the facilities & visibility required to them to succeed in future.

**13. ZALVIT ENTERPRISES PVT. LTD.
(CIN: U74994DL2019PTC350402)**

Today the youth of this country frequently use social media like Instagram, The plan is to post advertisements from the accounts of common users. When hundreds of users will post the content, it will gain more reach than any other corporate ad. The Brands will get a reach for their marketing while the users will get paid for it. Advertisement industry is rapidly growing and will soon cover all the social media. Currently no big advertisements or marketing is done on Instagram. We are developing the portal for this interaction.

**14. WAARIS GREEN LABS PVT. LTD.
(CIN: U37200DL2019PTC350610)**

We are a waste management and waste education start-up, currently working on paper waste management. We help to micro manage the waste produced and trying to improve the collection frequency (as close as 1 month). Against the paper waste collected we provide our services which include recycled paper stationery, educational workshops, tree plantation and sharing drives.

**15. ROADUST ENTERPRISES PVT. LTD.
(CIN: U72900DL2019PTC351002)**

Dhannoo Bicycle Sharing is the most innovative bicycle sharing system. It is designed with the vision to become the most customer focus transportation

service by feasible pricing and best in class service. It is a dock less bicycle sharing system where people can unlock a bicycle from their mobile phones & enjoy their rides. We have come up with strategies & operational plans to maximize the efficiency of the system. The increasing pollution and road congestion make it a necessity to have an environment friendly alternative to transportation.

**16. DSWM LABS PVT. LTD.
(CIN: U74999DL2019PTC349234)**

We are developing a decentralized waste segregator capable of source segregation biodegradable and non-biodegradable waste. It segregates any kind of mixed waste with 95% of efficiency. The segregators are incorporated in mobile waste collectors. With our mechanical segregator integrated right into the waste collector we will be able to segregate the waste in large amounts during the process of collecting the waste. The idea incorporates a blend on mechanical components such as Mixed waste shredder, pneumatic separators, tommel Screening, Size screening, Air classifier (density separation) along with an advance application of physics to achieve segregation.

**17. SEUTUS WASTE MANAGEMENT TECHNOLOGIES PVT. LTD.
(CIN: U74999DL2019PTC347363)**

Smart dustbins will be installed in the houses. These bins have two separate compartments one each for biodegradable & non-biodegradable. The consumer just keep bin house and bin automatically senses and segregates the waste in appropriate compartment. Every bin has a location

set via GPS for collection. Once bin gets filled it automatically sends bin location for collection. Biodegradable is converted into 100% organic manure and sold to farmers in competitive to chemically prepared manure. Rest of the waste is recycled. Manure is converted within 3-4 days using highly optimum condition collection of garbage us entirely free for customer.

**18. RASPIL PVT. LTD.
(CIN: U74999HR2020PTC089802)**

It is a network marketing based social commerce startup in the category of fruits and vegetables. Utilising on demand harvesting it connects farmers to end consumer via micro-entrepreneurs. Domain business area: Agriculture, E-commerce, Supply Chain. This startup has competitors like Otipy, Bigbasket, Milkbasket. It has Raised pre-seed funding of `1.4 Crores.

19. ACHIEVEMENTS OF “DTU INNOVATION AND INCUBATION FOUNDATION” (DTU IIF).

A. DTU IIF is “Nation Incubator Partner of Ministry of Commerce and Trade, Govt. of India and supports activities related to mission of Government related to “STARTUP INDIA and “MAKE IN INDIA”

- a) DTU IIF is part of program “Mentor of Change” of NITI AAYOG, Govt. of India
- b) DTU is selected for implementing “National Innovation and Startup Policy (NISP)” in DTU by MHRD(Gol), DTU IIF is nominated Coordinator by DTU.
- c) 5 Startups have raised external funding from Venture Capitalist and Individual Investors
- d) One of DTU IIF startup company, FAUCET LABS PVT. LTD. (Under Brand Name “CYPHER ROCK”, operating in business of developing a personal distributed hardware-based recovery system to store private keys for decades) got selected out of 10 startups companies in the world and received US \$100,000.00 in convertible equity note from Consensys Ventures. The directors of this company, students of DTU are funded by this funding agency/ investor to attend training program of 2 weeks each in Germany and USA to gain proficiency in “BLOCK-CHAIN TECHNOLOGY”
- e) One of DTU IIF startup company (RASPIL PRIVATE LIMITED) got foreign funding of Indian `one crore Fourty lakhs in US \$ by our alumni currently in USA.
- f) Most of our startups companies of DTU IIF are Registered with Department of Promotion of Indian and International Trade, Gol (Start-Up India Mission), This is mandatory requirement receiving international funding and Income Tax benefits to startup companies in India.
- g) DTU IIF is a member of “Task-Force” in framing the “STARTUP POLICY” of Government of NCT of Delhi.
- h) Letter of Appreciation from Ministry of Economy, UAE as National Partner, India (Invest India, DPIIT, Gol)
- i) DTU-T&P/DTU IIF has partnered with NASSCOM FOUNDATION for implementing a skilling and entrepreneurship opportunity for students of DTU through a

Makerspace program funded by Ciena.

B. ACTIVITIES OF “DTU INNOVATION AND INCUBATION FOUNDATION” (DTU IIF) IN PROMOTING AND CREATING ECOSYSTEM FOR INNOVATION AND ENTREPRENEURSHIP IN DELHI TECHNOLOGICAL UNIVERSITY (DTU)

- i) DTU IIF provides incubation facilities in 24 X 7 mode at DTU Main Campus and DTU East Delhi Campus in the following areas:
- ii) Infrastructure and facilities-based services (Physical Space for Incubation to the Startup companies and high-speed internet access and telecom services)
- iii) Business Services (Awareness about basics of Business, Marketing Assistance and E-Commerce Assistance)
- iv) Shared Administrative and office services: By providing Accounting, Company Secretary and Legal services through our consortium of such service providers for our Startup companies at DTU IIF
- v) Financing (Through seed fund and Access to Finance through venture capitalist i.e., VCs). Seed fund is also provided from the Grant given by GNCTD to University Incubator i.e., DTU IIF), We also help in raising funds from other sources to our Startup companies.
- vi) Networking and Connecting to the other Startup Ecosystems nationally and internationally by sending our Startup companies promoters/director who are DTU students to participate in activities

like “Startup weekends”, Lectures, Seminars, Conferences and Startup challenges. These activities we also promote at our entire University level.

- vii) Education and Access to Knowledge: By arranging lectures at DTUIIF inviting experts/CEOs of Incubators/Industry Experts in the areas of our Startup companies’ domain to provide comprehensive business training and imparting training in presentation skills so that our Startup companies can pitch their ideas in raising funds from Venture Capitalists (VCs) and other Institutions who provide funds for Startup Companies.
- viii) Brand Building: Building the brand of our Startup companies by sending our profile of DTU IIF through email and other platforms.
- ix) As DTU IIF operates on in 24X7 mode, we provide them small kitchen services like tea/coffee/soup vending machine, microwave ovens and fridge.
- x) DTU IIF organises various advocacy programs in the areas Innovation and new venture Development to Startup companies incubating at DTU IIF by Organising Startup week end programs and Town Hall for entrepreneurship and Innovation.
- xi) Participating in Startup Mission of Government as:
- xii) DTU IIF is “Nation Incubator Partner of Ministry of Commerce and Trade, Govt. of India and supports activities related to mission of Government related to “INVEST INDIA” “STARTUP INDIA and “MAKE IN INDIA”

- xiii) DTU IIF is part of program “Mentor of Change” of NITI AAYOG, Govt. of India
- xiv) DTU IIF is a member of “Task-Force” in framing the “STARTUP POLICY” of Government of NCT Of Delhi

C. CONTRIBUTIONS OF “DTU INNOVATION AND INCUBATION FOUNDATION” (DTU IIF) IN AREAS OF INNOVATION AND ENTREPRENEURSHIP IN DELHI TECHNOLOGICAL UNIVERSITY (DTU)

DTU IIF provides academic support and delivery of course to all the courses offered in the areas of Family Business, Entrepreneurship, Innovation and New Venture Development in the following degree programs offered by DTU:

- MBA (Family Business and Entrepreneurship) at USME, DTU
- MBA (Innovation, Entrepreneurship and Venture Development), USME, DTU) This degree program has compulsory component of residency of this degree aspirant in the Incubator of the University i.e., DTU IIF.
- Ph.D. (Innovation, Entrepreneurship and Venture Development) in subject domain.
- Entrepreneurial Track Electives offered to all students of B.Tech. program of DTU under FEC category i.e., Entrepreneurial Exploration and New Venture Development at Main Campus, DTU.
- Ph.D. (Innovation, Entrepreneurship and Venture Development), USME, DTU (Which requires inputs from a functioning incubator of the university)

D. DTU IIF’S VALUE CREATION FOR DELHI TECHNOLOGICAL UNIVERSITY

- DTU IIF as University’s Incubator fulfil the gap of theory and practice aspect of Technology/management subject domain and adding very high value to such courses run by DTU but shall also make these course contemporary and contextual by following global trends in technical education with innovative and entrepreneurial perspectives, which are vital for university’s various degree programs and to compete with other national and international best Institutes/Universities.
- DTU IIF also plays a role as “Central Facility” of DTU in NIRF, NBA and other National and International Ranking systems for our University.

E. BEST PRACTICES OF DTU IIF

1. The incubation center provides 24x7 access, 24x7 electricity & backups. (Excluding national holidays).
2. Good collection of books on innovation, incubation, startups & management of new Enterprises Development.
3. Availability of high-speed Wi-Fi for all startup companies.
4. Availability of specialized labs in all the departments of DTU for Startups Companies.
5. Provisioning of seed funds to the Startup Companies as per policy mandate of Government of NCT of Delhi

5.2 Human Resource Development Centre

- In consonance with the national policy on Education (NPE), 1986 of University Grants Commission, Delhi Technological University established Human Resource Development Centre under section 7(13) of the Delhi Technological University Act, 2009 with effect from 1st January 2018.
- HRDC will be focused to the crucial development of quality ensured delivery of education to continuous knowledge up-gradation, capacity building and motivation of teachers for accepting challenges arising from new research and advancement in technology and recent trends of breaking barriers of subject related to science and technology.
- At present there are 66 Human Resource Development Centre (HRDC) established by UGC in different universities over a period of time since 1986.

Organisation Structure

Prof. S. Ambu Kumar	Director, HRD Cell
Dr. Vinod Singh	Associate HRD Cell
Dr. Bharti Singh	Coordinator

Types of Programs.

1. Orientation Programs

Every new faculty member in higher education will be required to undergo a four-week Orientation / First level Program which will be focused on some broad area of knowledge spanning a few allied disciplines with minimum of 24 working days (excluding Sundays) and 144 contact hours (six hours a day).

2. Refreshers courses

These will be mainly focused for those faculty members who have already undergone through the Orientation/ First Level Program in an identified broad area with minimum of 18 working days (excluding Sundays) and 108 contact hours (six hours a day).

3. Workshops

These will be organized for shorter duration of one week (6 working days, 36 contact hours) and will be covering mainly for capacity building of academics, administrators and other stakeholders.

4. Short-term course

3-6 days duration especially on research methodology and specialized themes of interest.

Trainings/Programmes conducted during the session 1st August 2020 to 31th July 2021.

- A training program for Newly Recruited Faculty Members of DTU was organized from 06-01-2021 to 07-01-2021 for 50 participants.
- A Two Days training program on effective office management for ministerial staff of DTU was organized from 26-02-2021 to 27-02-2021 for 55 participants.
- An Orientation session for students & faculties of DTU by Innovation Ambassadors(s) was organized on 13-03-2020 for 200 participants.
- An Online Training Program on GEM for the faculty members of Mechanical engineering department and officers/ officials of the store & department was organized on 29th July, 2021 for 40 participants.

5.3 Solar Energy Centre

Dr. J. P. Kesari

Operation of 432 KW SPV roof top plant on resco model and 40 KW SPV plant on capex model functioning at Delhi Technological University.

Operation of 432 KW SPV roof top plant on resco model and 40 KW SPV plant on capex model functioning at Delhi Technological University.

Delhi Technological University has installed 432 KW of Solar Photovoltaic Rooftop Plant on resco model by M/S Hero Future Energies on the terrace of the various departments. This has been further added by 40 KW SPV plant by M/S Photon Energy Systems Ltd. on capex model on the rooftop of administrative building. All together there has been 472 kW SPV plant in DTU. Both the plants have been working very satisfactorily. All 472 kW solar panels have been installed in Science block (108 kWp, having 1 Electronic solar metre), Mechanical

block (150 kWp, having 2 Electronic solar metres) and Electronic block (174 kWp, having 3 Electronic solar metres). Hero Future Energies has provided the solar metre readings for the last one year from 17th – 18th August , as given in the table below.

It has been observed that the maximum solar electricity output of all the 432 kW solar panel from all the 6 electronic metres is found as 49482 kWh in the month of September 2017. This is on an average 3.81 kWh per day production from 1 kW panel.

A 40 kWp system has been also commissioned in the month of June 2015 and functioning properly. It has two inverters of 20 kW each connected to the above system. The control room has been built on the ground floor at the back of the building. The DC power so generated by the SPV plant is converted into AC power by the SSE model inverters and fed to the 3 phase Delhi Technological grid.

The above two systems are grid connected to the TATA power Delhi Distribution Limited. (TPDDL).



Month	Science Block (108 kWp)	Mechanical Block (150 kWp)			Electronics Block (174 kWp)				Grand Total All 3 blocks
		XB456414 (kWh)	XB456435 (kWh)	Total (kWh)	XB456407 (kWh)	XB456441 (kWh)	XB456439 (kWh)	Total (kWh)	
Aug 17	7473	6315	9623	15938	5690	8857	2825	17372	40783
Sep 17	9620	886	13357	22243	1467	12225	3927	17619	49482
Oct 17	6512	5541	8515	14056	1145	7304	2353	10802	31370
Nov 17	5881	4607	7422	12029	43	6094	1880	8017	25927
Dec 17	5866	4803	5256	10059	0	5750	2129	7879	23804
Jan 18	6772	5617	2934	8551	0	7378	2553	9931	25254
Feb 18	7696	6398	3296	9694	0	6298	2852	9150	26540
March 18	7199	8484	4640	13124	0	4199	3381	7580	27903
Apr18	7373	7180	5815	12995	0	4737	3411	8148	28516
May 18	9911	7620	11503	19123	5125	8760	3291	17176	46210
June 18	12218	7465	10159	17624	6961	5199	3206	15366	45208
July 18	10537	5972	8955	14927	7137	10584	3120	20841	46305

5.4 Kitchen Waste Plant

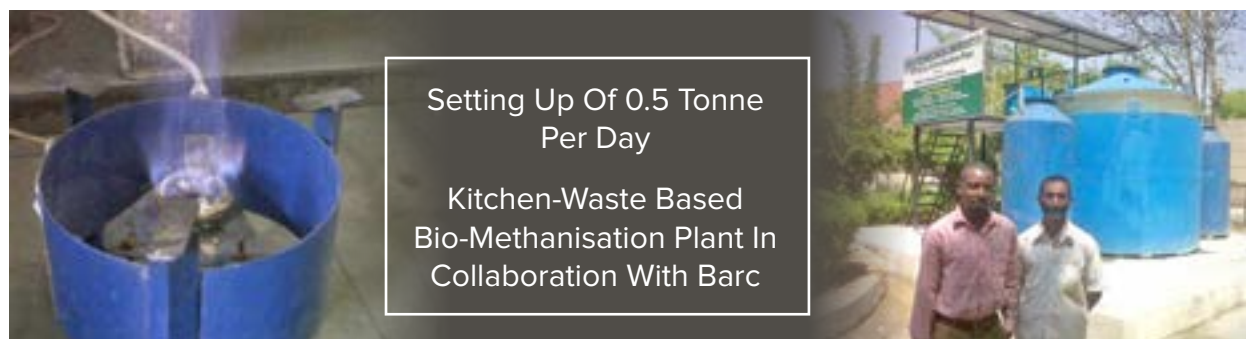
Dr. J. P. Kesari

Delhi Technological University in collaboration with Bhabha Atomic Research Centre (BARC) has set-up 500 kg per day kitchen waste biogas plant in the backyard of main canteen. This is based on Nisargruna technology, developed by BARC which is a method of processing biodegradable waste. It is an environment friendly technology, which delivers two valuable products i.e., flammable methane and organic manure. The waste generated in the main canteen is fed into the installed biogas Plant. This plant was installed and commissioned in April, 2014. Initially, the system started functioning with about 50 kg wastes per day and slowly it moved to more than 100 kg per day and in due course of time it will reach to its full capacity i.e., 500 kg per day. The equal amount of water is also mixed with the waste. It is mixed and grinded and then fed to the plant. The methane gas so generated by this plant is fed to the kitchen of the main canteen.

This technology is very useful to sabzimandi and Municipal Corporations to process their vegetable waste as most of biodegradable waste can be utilized as raw material for the plant.

Biogas and manure is valuable product. Nevertheless, whole technology creates various types of opportunities for different prospects. Biogas can also be used for the generation of electricity. Waste

segregation at the source is another major issue which needs proper attention. Biogas production is faster because of combination of aerobic and anaerobic digestion technology. Electricity generation from biogas is also one of the potential benefits. This technology development will save environment to greater extent. It will also provide benefits in the form of Biogas, reduction in GHG emission, health benefits, social benefits and benefits in terms of financial investments. . Research is undertaken to convert methane in to hydrogen under high temperature and reaction with steam. Many undergraduate students are working on this project on conversion of methane in to hydrogen production as minor and major projects in 7th and 8th semesters as well as innovative projects in 1st, 2nd, 3rd and 4th semesters. In future there will be scope for extra benefits like subsidies and benefits like carbon credits, which will give high rate of return on total investment. Entrepreneurs will excel in their ventures by selling services and products related Technology. DTU is in contact with some other organizations to provide consultancies in this area. The DTU students have already produced some research papers. Few students are doing their B. Tech., M.Tech and PhD projects. Presently some students have taken up this project during their summer internship. Due to prolonged covid 19 online classes, maintenance work is still remains to be taken up.



5.5 Centre for Advanced Studies and Research in Automotive Engineering

About CASRAE:

Centre for Advanced Studies and Research in Automotive Engineering (CASRAE) was founded in 2003 in the erstwhile Delhi College of Engineering with the objectives of developing a variety of alternative fuels and engine technologies to reduce the dependence on imported crude petroleum and minimize harmful exhaust emissions. The centre has seen a radical growth in the last 18 years and it is being considered as one of the key research centers not only in India but abroad also. The faculty along with the students have published research papers in a large number of International Journals and have also attended international conferences abroad. The faculty and students are attending various American Society of Mechanical Engineers (ASME) and Society of Automotive Engineers (SAE) conferences and also publishing papers in Elsevier, Wiley, Springer, Taylor & Francis, SAE, IMechE, and ASME Journals.

The prime focus areas in the Centre include; Advancement in the design of Compression Ignition and Spark Ignition Engines, Development of Micro-Turbojet Engines, Studies of Aerodynamic Characteristics of various airfoils, Design characteristics of Aircraft, Hybrid Vehicles, CFD study of spray injection, Biofuels like biodiesel, ethanol, n-Butanol.

Bio-additives like Triacetin, and host of other promising alternative fuels such as renewable diesel, nano fuel, Compressed Natural Gas (CNG), Hydrogen, etc.

Advances in Rheo-Tribometer Webinar (July 2021, CASRAE)

CASRAE DTU organized an online seminar on “Advances in Rheo-Tribometer” on

July 05, 2021, at 11:30 am. The speaker of the workshop was Dr. Kartik Pondicherry. Tribology is the science and engineering of interacting surfaces in relative motion. It includes the study and application of the principles of friction, lubrication, and wear. Tribology is highly interdisciplinary, drawing on many academic fields, including physics, chemistry, materials science, mathematics, biology, and engineering. People who work in the field of tribology are referred to as tribologists. The students were able to understand more about this field. They also had a brief discussion on further research works that can be conducted. The seminar was attended by more than 250+ participants from various colleges.



ENERGY QUIZ (March 2021, CASRAE)

A quiz on Sustainable Development was conducted on 15th March 2021 by the Institution of Mechanical Engineers (IMechE) DTU Chapter. It was open for all students of all branches of B.Tech, M.Tech, and Ph.D. Programs. The quiz had 50 questions from different fields, with the common theme of Sustainable Development. The event saw enthusiastic participation from many students of different colleges across different branches, out of which multiple students affirmed that the quiz was a great learning experience for their inquisitive minds. The first 3 toppers received cash



prizes of rupees ₹ 1500/-, ₹ 1000/- and ₹ 500/- respectively. The organizing team was very glad to organize such an interesting event that fascinates young minds.

Sustainable development - India's preparedness vis-à-vis Global Initiatives Seminar (March 2021, CASRAE)

Centre for Advanced Studies and Research in Automotive Engineering, DTU in association with IMechE DTU



Chapter organized an online workshop on “Sustainable development - India’s preparedness Global Initiatives” on Monday, March 01, 2021, from 10.00 AM onwards. The speakers for the workshop were: Dr. Parvesh Kumar, Dr. Vikash Kumar, Dr. Yahaya Alhassan. Professional engineers have a significant role to play in sustainability. They work to enhance the welfare, health, and safety of all, with the minimal use of natural resources and paying due regard to the environment and the sustainability of resources. Their work is influenced by the opportunities and challenges that sustainability brings. Engineers are the providers of options and solutions to maximize social value and minimize environmental impact.



The workshop witnessed more than 100+ participants attended the workshop in online mode. The event was followed by a discussion between the speakers and the attendees.

Ongoing Projects:

SAVONIUS WIND TURBINE (June 2021-Present) The Students of Centre for Advanced Studies and Research in Automotive Engineering (CASRAE) are developing a wind turbine from scratch. On an existing savonius wind turbine, a novel reorienting blade mechanism is designed



and implemented. The proposed design enhanced the power coefficient of the Turbine and ensures the Savonius turbine's safety by changing the blade orientation according to the wind conditions. During simulations, a maximum increase of 9.5% and 7.6% in the power coefficient is obtained for blades at 10° and 20° positions.



Quaternary Biodiesel blend- A team of CASRAE students is currently working on preparing a stabilized quaternary blend biodiesel under the guidance of Prof. Naveen Kumar. The blend was tested for various engine performance and emissions characteristics and the collected data was used for prediction using Machine learning for optimizing the engine performance and emissions parameters.

Completed Projects:

A Super Critical trans-esterification Reactor (as per DTU design) has been developed



at the center. This is the first reactor in India, which is working under supercritical conditions. It can process a very high FFA feedstock in 5-10 minutes with a purity of more than 98%.



Research Excellence Award

Two Ph.D. scholars namely: Mukul Tomar and Ankit Sonthalia were conferred the research excellence award in a university

ceremony held on February 18, 2021. The details of the papers are given as under:

Category 2 (Prize money ₹ 100,000/-)

1. Naveen Kumar, Ankit Sonthalia, Rashi Koul, "Optimization of the process parameters for hydrotreating used cooking oil by the Taguchi method and Fuzzy logic", ASME Journal of Energy Resources Technology, doi: 10.1115/1.4047405, <https://asmedigitalcollection.asme.org/energyresources/article-abstract/doi/10.1115/1.4047405/1084223/Optimization-of-the-process-parameters-for?redirectedFrom=fulltext> (Publisher – ASME; SCI Indexed) (Category 2)

Category 3 (Prize money ₹ 50,000/-)

1. Mukul Tomar, Amit Jain, Prashant Chandra Pujari, Hansham Dewal, Naveen Kumar, "Potentials of waste plastic pyrolysis oil as an extender fuel for diesel engine" Arabian Journal of Geosciences, Vol. 13, Article No. 504, 2020 <https://link.springer.com/article/10.1007/s12517-020-05574-6> (Publisher Springer, SCIE Indexed) (Category 3)



2. Mukul Tomar, Naveen Kumar, "Effect of multi-walled carbon nanotubes and alumina nano-additives in a light duty diesel engine fuelled with schleicher oleosa biodiesel blends"

Sustainable Energy Technologies and Assessments, Vol. 42, <https://www.sciencedirect.com/science/article/abs/pii/S2213138820312601> (Publisher Elsevier, SCI Indexed) (Category 3)



Achievements of Centre for Advanced Studies and Research in Automotive Engineering

16 publications in journals/conferences / book chapters were published by Prof. Naveen Kumar and his students of CASRAE during 2020-21.

Invited talks by Prof. Naveen Kumar

1. "Biofuels for EV Application: Status and Opportunity for India" FDP on Opportunity and Challenges for Electric Vehicles in the Automotive, National Institute of Technology Srinagar, July 26-30, 2021 (in online mode).
2. "Renewable Jet Fuel- Potential & Challenges" 1st International Conference on Computational Intelligence & Energy Advancements (ICCIEA-2020) Vaagdevi College of Engineering, Warangal, India, December 12-13, 2020. (in online mode)
3. "Green Energy- A Bridge for Sustainable Development" Green Energy Technologies: Need of Future Jointly Organised by NIT Srinagar & VCE, Warangal August 10-14, 2020. (in online mode)

4. "Vegetable Oils Derived Fuels-Scope and opportunities" Emerging Trends in Mechanical Engineering" (ETiME-2021) Maharishi Markandeshwar (Deemed to be University), Mullana, Haryana May 24-29, 2021.

Ph.D Awarded:

1. Roshan Raman Topic : Experimental Studies on the Utilization of Acetylene and Oxygenated Blends in a Dual Fuel Engine, DTU, 2021.
2. Mukul Tomar Topic: Some Studies on Nano-Particles Doped Alternative Fuels in Unmodified CI Engine, DTU, 2021

M.Tech Awarded:

1. Hansham Dewal, Topic : Some Studies on Engine Performance and Emission Characteristics of a SI Engine Fuelled with Oxygenated Bio-Additive (Triacetin), DTU, 2020 Post-Doc Position by CASRAE Research Scholar
2. Dr. Mukul Tomar who finished his Ph.D. in June 2021, get a Post-Doc position in University of Illinois Chicago, USA. It is a very distinguished position for a research scholar of DTU. He is currently working on a USA government project.

Higher Admission Overseas

1. Prashant Chandra Pujari, who was Department Rank 1 (DR-1) of Mechanical



Engineering Department in 2021 and also an active member of CASRAE, secured admission in Post Graduate course in Imperial College London, UK with a full scholarship.

2. Mukesh Yadav, who was also an active member of CASRAE secured admission in the Post Graduate course in University of California, Los Angeles.



3. Shrishti Mishra, who was one of the brightest students of CASRAE secured admission in the Post Graduate course in Robosys Engineering in RWTH Aachen University, Germany.



5.6 Centre for Value based Education

Board of Management in its 26th meeting on 8.12.2017 has approved the establishment of Centre for Value based Education at DTU. The role of the centre is to prepare and implement innovative resource material for value education for students, encourage the students about the benefits of implementing professional ethics in their later life as professional. Also organizing workshops and STCs to motivate the teachers to use value education, yoga and meditation as a tool in making better citizen.

AIM:

To create awareness, inspiration among the students and teachers about the need of higher dimensions of education in becoming enlightened citizens which is achieved by imparting techniques and Knowledge for promoting human values and thereby making better engineers with the better use of ethics and moral values in professional and personal lives.

Objective:

1. Introduction of an audit course in the 1st year with appropriate credit weightage on ethics, human values, social and spiritual values.
2. To undertake research in the area of “Interaction of Science, Technology and Human Values” and to promote an understanding of its implications.

3. Organizing workshops to train teachers of various technical institutions in this field.

Organisational Structure:

Dr. T. Vijay Kumar (Department of Civil Engineering)	Co-ordinator
Sh. Anoop Lather, PRO	Advisor
Dr. Yasha Hasija (Department of Biotechnology)	Deputy Co-ordinator
Dr. Vikas Gupta (Delhi School of Management)	Deputy Co-ordinator

Activities Undertaken:

Academic council of DTU in its 27th meeting approved to include two new foundation elective courses proposed by the centre, for UG students.

1. FEC 56 Universal Human Values
2. FEC 57 Leadership Mastery through Self management.
3. FDP organised during July 19-23, 2021 on “Leadership Mastery through Self Management”.
4. FDP organised during April 15-19, 2021 on “Ethics and values in Technical Education in Context of National Education Policy 2020”.

5.7 TIFAC-Core in Fiber Optics and Optical Communication

ORGANISATIONAL STRUCTURE:

Prof. R. K. Sinha	Coordinator
Dr. Yogita Kalra	Coordinator

TIFAC Core @ DTU

TIFAC-Core in the area of Fiber Optics & Optical Communication has been established in Delhi Technological University (Delhi College of Engineering), Delhi for which an agreement was signed between TIFAC& DCE on July 6, 2004. The activities of this TIFAC-CORE at DCE is supported by TIFAC/DST, Govt. of NCT of Delhi and partners from industries under Mission REACH Program, Technology Vision-2020, Govt. of India.

Vision

To establish a world class knowledge centre providing education in the areas of Fibre Optics and Optical Communication System that promotes research and development leading to innovative applications of Fibre Optics, fostering institute-industry linkages and entrepreneurial culture encompassing all aspects of interaction of light and matter for the betterment of the society.” To establish a world class knowledge centre

providing education in the areas of Fibre Optics and Optical Communication System that promotes research and development leading to innovative applications of Fibre Optics, fostering institute- industry linkages and entrepreneurial culture encompassing all aspects of interaction of light and matter for the betterment of the society.

Student achievements

- Pooja Chauhan received the travel grant to attend SPIE PHOTONICS WEST- 2020.

Activities

- An open online quiz competition on the theme “Light: Concepts and Applications” was organized for the students.
- The Painting and Drawing Competition for School Children was organized on the occasion of International day of light.
- A lecture session on “From antennas to integrated photonics to kilowatt lasers: how to choose your field of study” was organized for M.Sc. and research students was delivered by Mr. Jose Porez (university of Rochester, NY, USA)

Achievements of TIFAC COre

- 9 journal publications, 5 conference publications and 2 book chapters were published by TIFAC-CORE during year 2020-21.

5.8 Centre for Advanced Production and Industrial Engineering

Research

CAPIER, Centre for Advanced Production and Industrial Engineering Research, a Centre for Excellence has been established on 8 April 2015. CAPIER is known for organizing expert lectures, workshops and industry institute interactions. CAPIER invite B.T ech. & M.T ech. students for internship during summer and winter holidays.

CAPIER also organizes visit to industries for motivating the students towards advanced technology. CAPIER holds a name in the institution for supervising many good projects for B. Tech., M. Tech., and at the level of Ph. D. CAPIER also support IJAPIE, an International Journal in the Area of Production and Industrial Engineering, a peer reviewed journal with ISSN 2455-8419.

CAPIER initiated organizing an international conference in the name of ICAPIE, International Conference on Advanced Production and Industrial Engineering. The first international conference ICAPIE-2016, was held during December 2016 and was a great success. The second international conference ICAPIE '17 was arranged in partnership with many institutions and made a name of its own. The third international conference ICAPIE '18 was held during 5-6, Oct 2018 arranged at Hotel CASPIA, Delhi. The proceedings of the conferences were greatly appreciated. The fourth international conference ICAPIE'19 was planned at DITE, Delhi during 20-21, Dec 2019. Proceedings were published by LNME SPRINGER, SCOPUS Indexed. Selected papers were published in SCIE Journals.

The fifth international conference ICAPIE 2020 was planned at NTU Singapore, which was cancelled due to COVID-19 pandemic.

The sixth international conference ICAPIE '21 was planned and held at Department of Design, DTU Delhi during 17-18, June 2021. The paper presentation was arranged ONLINE mode. Proceedings were published by LNME SPRINGER, SCOPUS Indexed. Selected papers were published in SCIE Journals.

CAPIER also support faculty development programs and staff development programs. AIM-2015 and SDTSMT-2015 were conducted successfully with sponsorship of TEQIP-II. AMOM 2017 a two weeks program was marked as best FDP by the participants. Pro-De 18 and several other one-day seminar cum workshops and Internships were organized.

A talk on ROBO and practice of Robotics and Automation was organized. CAPIER at Delhi Technological University is getting good name and growing with experienced faculty and budding researchers.

Industry Institution Interactions were held regularly.

VISION

To be Centre for Excellence in the area of production and industrial engineering, playing its role in preparing technical teachers and students for future requirements at national and global level.

MISSION

- Faculty Development
- Skill Development
- Entrepreneurship Development
- Research and Publications
- Industry- Institute Interaction

AREA OF RESEARCH

- Materials

- Design
- Product Design
- Interaction Design
- Industrial Design
- Production Process
- Manufacturing
- Mechatronics
- CAD/CAM/CIM
- FMS/Automation
- Lean Manufacturing
- Optimizing Techniques
- Quality Control
- Production/Operation Management
- Supply Chain Management
- Project Management
- Financial Management
- Production Economics
- Electronics in Manufacturing
- Power Skills in Manufacturing
- Software Security and Management
- Small Scale Industries Management

Organisational Structure:

PRINCIPAL COORDINATOR	Dr. Ranganath M. Singari	
ADVISORY MEMBERS	Dr. S. K. Garg Dr. R. S. Mishra Dr. Vipin Dr. Reeta Wattal Dr. R. C. Singh Dr. Rajiv Chaudhary	Dr. Qasim Murtaza Dr. S. G. Warkar Dr. Nand Kumar Dr. Girish Kumar Dr. Nitin Puri Dr. Roli Purwar
FACULTY COORDINATORS	Dr. M S Niranjana Dr. N. Yuvraj Dr. Harish Kumar	Ms. Navriti Gupta Ms. Sushila Rani Ms. Taruna Singh
RESEARCH COORDINATORS	Dr. Ravi Butola Dr. Shadab Ahmad	Mr. Md Jamil Akhtar Mr. Mohd Tayyab
STUDENT COORDINATORS	Mr. Kartikeya Bector Ms. Rani Medhashree	Mr. Sahil Bansal
STUDENT CO-COORDINATORS	Mr. Bhavay Khatri Mr. Dhruv Deo Pathak	Ms. Hrutuja Ms. Vrinda Aggarwal

5.9 IPR CELL

Introduction:-

Intellectual Property Right Cell was constituted on 22.06.2017 and reconstituted on 15.02.2018 under IRD. At present, it has 01 Coordinator and 01 Co-coordinator detailed as under:-

1. Prof. Kapil Sharma, Coordinator, IPR Cell
2. Prof. Gurjit Kaur, Co-coordinator, IPR Cell

List of Patents in year 2020-2021

S. No.	Inventor Name/ No	Title	Date	Status	Dept
Published: 16					
1	With Samsung electronics co. Ltd./ Sachin Kumar Aggarwal, Kapil Sharma US20210265874A1 Int Publication Number	Apparatus and method for transmitting a signal in a wireless power transmitter	Aug 26 2021	Published	IT
2	With Samsung Electronics Co. Ltd./ Sachin Kumar Aggarwal, Kapil Sharma IN201911047873 A Nat. Publication Number	Method and system for intelligent 3d aerial wireless transmission	May 28 2021	Published	IT
3	Parvesh Ali R.S. Walia Qassim Murtaza Ranganatha M.S. IN202011001827A Nat. Publication Number	Thermal additive centrifugal abrasive flow machining and method thereof	July 16 2021	Published	Mech.
4	With Samsung Electronics Co. Ltd./ Sachin Kumar Aggarwal, Kapil Sharma WO2021101333A1 Int Publication Number	Method and system for intelligent 3d aerial wireless transmission	May 27 2021	Published	IT

S. No.	Inventor Name/ No	Title	Date	Status	Dept
5	Nirmal Pandey Taranpreet Kaur Nirav Patel Sachin Papneja Braj Raj Singh Ravindra Jain Dalbir Singh Dhillon Manish Jindal Nitin Barthwal Pankaj Kodan Om Prakash Verma Amioy Kumar US20210153124A1 Int Publication Number	Method and apparatus for power management of electronic device	May 20 2021	Published	CSE
6	With Samsung Electronics Co. Ltd./ Rahul Aggarwal, Manoj Kumar IN201911033711A Nat Publication Number	Systems and methods for tagging and rendering content having sensitive portion	Feb 26 2021	Published	CSE
7	With Samsung Electronics Co. Ltd./ Rahul Aggarwal, Manoj Kumar WO2021033853A1 Int Publication Number	Method and system for processing content having sensitive portion	Feb 25 2021	Published	CSE
8	Dr. Mohan Singh Mehata IN202111006180A Nat Publication Number	Apparatus and method for detecting electric field modulated absorption and photoluminescence of a sample	Feb 19 2021	Published	App. Physics
9	With Samsung Electronics Co. Ltd./ Sachin Kumar Aggarwal, Kapil Sharma IN201911028443 A Nat Publication Number	Method and system for intelligently controlling beamforming for wireless transmission	Jan 22 2021	Published	IT
10	With Samsung Electronics Co. Ltd./ Sachin Kumar Aggarwal, Kapil Sharma WO2021010760A1 Int Publication Number	Method and system for intelligently controlling beamforming for wireless transmission	Jan 21 2021	Published	IT

S. No.	Inventor Name/ No	Title	Date	Status	Dept
11	Dr. Rishu Chaujar, Shivam Gupta IN201911027963A Nat Publication Number	A back contact electroplated thin cigs solar cell	Jan 15 2021	Published	App. Physics
12	Dr. Madan Mohan Tripathi, Ayush Verma, Akshansh Anand, Ananya Aggarwal, IN201911027954A Nat Publication Number	A device for synchronizing sound control lights, system and method thereof	Jan 15 2021	Published	EE
13	Anuja Agrawal, Dr. Raminder Kaur, Ravinderjit Singh Walia, IN201911027962A Nat Publication Number	Bio-based rigid polyurethane foam composition and method thereof	Jan 15 2021	Published	App. Chem.
14	Dr. Mohan Singh Mehata IN202011055098A Nat Publication Number	System and method for detecting trivalent metal ions	Jan 01 2021	Published	App. Physics
15	Mr. Sumit Kumar Sharma Dr. Neetesh Kumar, Prof. Rajni Jindal, Mr. Upendra Singh, Mr. Sanjay Patidar IN202011028931A Nat Publication Number	Smart autonomous weed detector and removal	Aug 21 2020	Published	CSE
16	Mohan Singh Mehata, Vineet Sharma, Abhinav Tandon IN201911052787A Nat Publication Number	Light emitting metal and dual metal- doped zinc selenide quantum dots and method thereof	Dec 27 2019	Published	App. Physics

Workshop Organized and participation

1. Intellectual Property Rights (IPR) Cell, IRD, DTU, organized a workshop on “Intellectual Property Rights & IP Management” on 16th March 2021 with IPR Experts in online mode. Total participation in the event was 119, which includes 87 students and 32 faculty.
2. Participation of the DTU students in the one day workshop entitles, “ Why

IP is important in academia? Join us for the session on “Why IP is important in academia?” by MoE’s Innovation Cell to celebrate World IP Day and to know about the role of intellectual property rights in encouraging innovation and creativity. Date: 26 April 2021 Time: 3.00-3.30 PM Speakers : Dr. Abhay Jere & Dr. Mohit Gambhir.

5.10 Multidisciplinary Centre for Geoinformatics (MCG), DTU-IQAC- Report from 1st August 2020 To 31st July, 2021

Prof. K. C. Tiwari

Geomatics Engineering (GE) Subject in GATE-2022

Due to sustained efforts made at Multidisciplinary Centre for Geo-informatics by Professor KC Tiwari, a new subject

called Geomatics Engineering (GE) has been added as subject in GATE-2022 to be organized by Indian Institute of Technology Kharagpur. This fulfils a long outstanding aspiration of the Geospatial students community



The screenshot shows the GATE 2022 website with the following content:

GATE 2022
Graduate Aptitude Test in Engineering
अभिज्ञानं विवेकं अविज्ञानं धनं

HOME GATE 2022 PAPERS DOWNLOAD INFORMATION OLD QUESTION PAPERS EXAM CITIES REGISTRATION + FAQS CONTACT US

New Papers

The two new papers (GE and NM) will provide direct benefits to graduates in these two areas, especially when the country needs human resources with advanced capabilities in Ship Building Industries and Geo-informatics

Geomatics Engineering (GE)
The Paper contains General Aptitude (GA) section (25 Marks) as applicable for all papers of GATE 2022. Rest of the Paper consists of two parts covering the syllabus: Part A (25 marks) and Part B (30 marks).
Part A is compulsory for all the candidates.
Part B contains two optional sections: Section I and Section II. Candidates have to choose any one of these during the examination. No separate score and ranking will be provided based on selection of sections.

PhD Degree Awarded

Ms. Rubena Vohra, Ms. Amrita Banari and Mr. Dwijendra Pandey successfully defended their PhD thesis under the guidance of Prof. KC Tiwari, MCG, DTU and were awarded Doctoral Degree in December 2020.



New Project Awarded - DST-NGP Pan India Proposal approval

Project Title- Pan India Networked Institutional Support for Post Covid Revival of Socioeconomic Activities in Agriculture and Construction Sectors

Funding Agency – DST

Value- ₹ 28,49,990/-

Status/Period - In Progress (2021-22)

Brief Summary - Resources of human interest and survival are not necessarily evenly distributed on the surface of earth. Therefore, the humanity and the Civilizations usually develop where there is greater concentration of resources of human interest and survival. There is continuous migration towards areas with resources of human interest, comfort, survival and security. Any natural or human activity/endeavour that creates greater human interest, comfort, survival and security often invariably results in migration and concentration of humans around these places. Industrial revolution was one such human endeavour which resulted in development of Centres of greater human comfort and security, which came to be known as towns and cities. These industrial cities and towns provided reasons for migration and concentration of human populace in these cities. At the same time, nature also provided many activities through natural disasters, epidemics, endemics and pandemics etc that caused permanent or temporary reverse migration. This project proposal seeks to mitigate the problems of migrants who returned to their native places and are now seeking jobs.

Completed/Ongoing Proposals

i) **Project Title -** Detection and Identification of engineered surfaces and Objects using Hyperspectral data

Funding Agency - DST under Networked Hyperspectral Project

Value- ₹ 35,02,400/-

Brief Summary- The work involved development of spectral libraries in an urban environment for various engineered surfaces and Objects and development of algorithms for their detection and identification using spectral matching algorithms

Publications : Eight publications in Peer-reviewed Journals

Major Highlights/Objectives - Study and selection of certain relevant engineered surfaces and objects to be covered which may include road and run way surfaces, steel structures and objects such as military tanks, aircrafts etc, Generation of hyperspectral spectra containing these selected engineered surfaces, objects and targets, obtain aerial/satellite based hyperspectral data in respect of these targets, carry out its detection using spectral matching algorithms, anomaly detection algorithms and independent component analysis and compare their performances using an ROC curve analysis, Identify set of most appropriate spectral bands and algorithms for detection and identification of these selected engineered surfaces, objects and targets.

Progress: Completed in Mar 2020

ii) **Project Title-** Mapping Impervious Surfaces from Temporal Multi-sensor Multi-resolution Data and its Area Estimation Using Super resolution

Funding Agency - SAC, ISRO, Ahmadabad

Value- ₹ 20 Lac

Brief Summary - Globally, there is rapid urbanization and various UN estimates predict a possible growth of almost 84% in urban areas with an increase in total population size of 10 billion by the year 2050. Traditionally, ground surveys and aerial photo interpretation have been the most accurate methods of mapping of impervious surfaces and its area assessment but they are not time effective. Availability of finer resolution spectral, spatial and temporal data can facilitate cost effective mapping and monitoring of changing impervious surfaces which in turn can assist in various aspects of urban planning, management of surface runoff/flooding and in monitoring the environment

Publications: Two publications in Peer-reviewed Journals

Major Highlights/Objectives - The aim of the proposed work is to develop alternative approaches and strategies for identification using spectral libraries, mapping and area estimation of impervious surfaces. It is also proposed to refine the estimated area of the identified impervious surface using super resolution methods/ techniques and to develop approaches for assessment of growth in impervious surfaces using temporal, multi-sensor and multi-resolution data

Progress: Completed in 2020

- iii) **Project Title** – Natural and manmade disaster risk reduction cloud burst, glacial lake outburst flood (GLOF) and flash flood studies

Fellowship - Himalayan Research Fellowship

Funding Agency - National Mission on Himalayan Studies (NMHS), GB

Pant National Institute of Himalayan Environment and Sustainable Development (GBPNIHESD) Kosi-Katarmal, Almora-263643, Uttarakhand, India

Value- ₹ 35,43,408/-

Brief Summary - Sustainable Developments in the Himalayan Region

Publications : In progress

Major Highlights/Objectives - Generation and Analysis of the data of selected region of Western Himalaya to identify the potentially dangerous and vulnerable glacial lakes susceptible to outburst and predict the consequences of the GLOF

Progress : Extended till 28 Nov 2021

- iv) **Project Title-** National Geospatial Chair Professor Scheme

Funding Agency – DST

Value- ₹ 35,00,000/-

Brief Summary - To guide in development of the National Geospatial eco system, To provide innovative ideas for implementation of the national geospatial policies and programmes, To propagate Geospatial Technologies in Academia, Government Departments, Research Centers & Industries etc, To evolve/co-ordinate network projects, To evolve/involve in Capacity Building and training programs for Human Resource Development in different areas of Geospatial Science & Technology, To motivate & guide prospective investigators to formulate research projects, To guide/co guide/ Supervise Masters/ Doctoral research students, To publish Research papers, Books & Manuals etc, To popularize Geospatial Technologies among general public.

Publications : In progress

Major Highlights/Objectives - Outline proposal for standardization of National Geospatial Education, Development of national geospatial science, technology and entrepreneurship programmes, Establishment of a Geospatial Centre at DTU, Establishment of a Geospatial Centre at DTU, Commencement of a multidisciplinary M.Tech program in Geo-informatics and its Applications, Conduct of Training/workshops on Geospatial Intelligence for Defence Services/CRPF/Police Services.

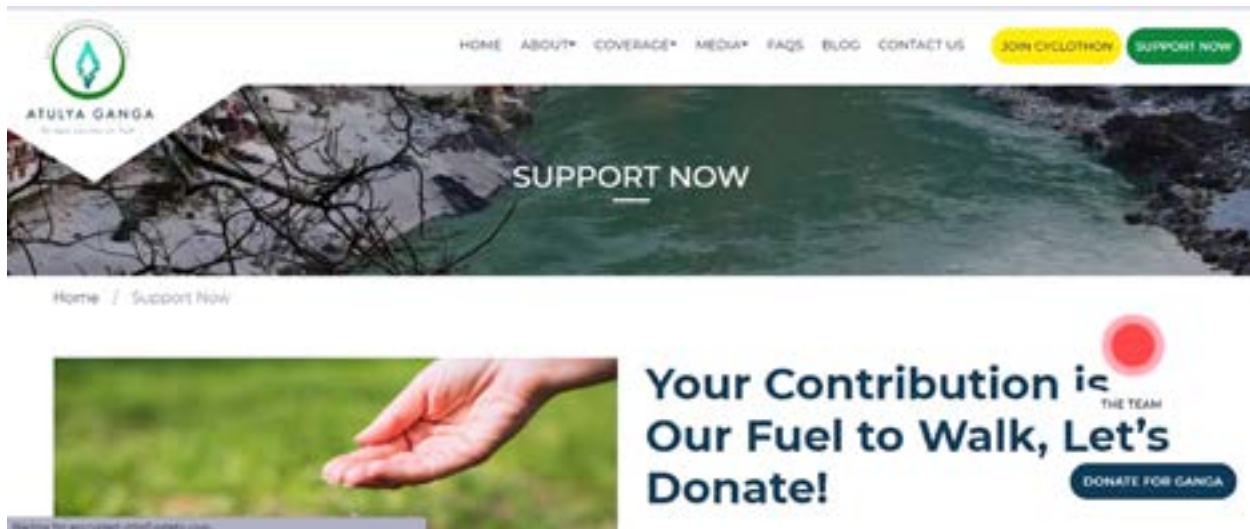
Progress: Extended till Mar 2022

Research Excellence Award

Dr. K C Tiwari and Mr. Dwijendra Pandey have been awarded Research Excellence Awards in 2020 by DTU.

Atulya Ganga Project

The Centre is working with Atulya Ganga project under the guidance of Prof. K C Tiwari. This is a project of Army veterans working with the objective of creating awareness for cleansing the Ganga. The veterans undertook a 5000 KM walk from Gomukh to Ganga Sagar and back to Gomukh during the Covid to help the Govt achieve its Ganga Clean mission. The Centre is developing a web GIS for the pollution data collected by the team during their walk.



5.11 Entrepreneurship Development Centre (EDC)

Organisational Structure:

Dr. Pushendra Kumar	Coordinator
Dr. Punit Kumar Arora	Member

Entrepreneurship Development Centre at East Campus, is a centre of excellence providing single point facilities to budding entrepreneurs of the DTU east campus. The aim of the Centre is to develop institutional mechanism to create entrepreneurial culture and to foster the entrepreneurship and knowledge enterprise development for wealth and employment creation by community members.

1. Incubation Centre with running five incubation start-ups under DTU-IIF, awarded grants, from the pipeline of ventures created through the MBA-IEV program.
2. Conducting the MBA(IEV) and MBA (FBE) Programs, reviewing curriculum and pedagogy for maximum impact on entrepreneurship efforts of students
3. Expanded mentorship program with entrepreneur/industry people, for domain based as well as full cycle mentorship, with panel of over 10 mentors, six engaged directly in teaching-learning workshops and mentoring.
4. More than 30 workshops for budding entrepreneurs in the campus, including skill development, experiential learning programs for MBA-IEV
5. Two workshops offered under the IIC program, with around three hundred registrations.
6. Students, scholars and Consultant, EDC mentored ventures of school students under the prestigious Master Blaster program of entrepreneurship mindset curriculum for Delhi Government. The next round is also closely associated with the EDC.
7. First batch of MBA IEV students graduated where one student joined IIM Lucknow Incubator as Manager Finance, two others joined prestigious PhD programs, and remaining students all have running ventures earning revenue. Two are DPIIT recognized ventures in technology, one more is based on manufacturing and quality certification-based business, one in digital space and rest in services industry.
8. First batch of MBA-FBE also graduated successfully, with several new ventures at pre-incubation to running venture stages. Second batch also some ventures in place.

5.12 Equal Opportunity Cell

Introduction:

The Equal Opportunity Cell of DTU is set up in the year 2018 with the aim to assist and counsel the students belonging to deprived sections including the scheduled castes, scheduled tribes, women, persons with disabilities, etc. pursuing various programs of studies at the University.

The main objectives of the cell are:

1. To work out suitable programs/ schemes, including Remedial Courses, for improving the academic performance of students from SC, ST, OBC, women and persons with disabilities (whether at undergraduate, postgraduate, Ph.D. or other levels) and/ or to monitor the implementation of such programs/ schemes;
2. To coordinate with government and other funding agencies (including Public Sector Undertakings/ Public Sector Banks) with a view to mobilise financial and other resources required for educational empowerment of the students from marginalized sections.
3. To disseminate the information and act as a counselling-cum-guidance centre for students belonging to the marginalized sections, especially with regard to academic, financial and social matters;
4. To help and develop a cordial inter-personal relationship among students and between teachers and the students from marginalized sections for academic interaction and extra-curricular activities; by sensitising the teaching and other staff.
5. To promote a social and psychological environment to raise awareness on sexual harassment and gender based discrimination against women.

6. To organize or conduct seminars/ symposia/ workshops/ conferences/ exhibitions/ training program, etc. from time-to-time on issues of contemporary significance for empowering, educationally and culturally, students belonging to the marginalized sections.

The following are the office bearer's:

1. Prof. Rachna Garg, Professor (Elect. Engg Deptt.) Director
2. Prof. T. Vijay Kumar, Associate Professor (Civil Deptt.) Additional Director
3. Dr. Geeta Singh, Assistant Professor (Env. Engg Deptt.) Assistant Director
4. Ms. Minni Jain, Assistant Professor (CSE Deptt.) Assistant Director

Activities done so far:

- Organised a webinar on 'Laws and Environment for Women in the Workplace' on 11th Oct.2020 at 4.00pm. The resource person was Dr.Sharad Kumari, State Program Manager of the Action Aid Association of Bihar and Jharkhand. No. of participants: 47 M:23 F:24
- Organised webinar on, 'IEEE PES Women in Power initiatives and Humanitarian Technology Projects for more Member engagements in Research and Innovation' on 3rd November 2020 at 4.00pm. The resource person was Prof. Celia Shehnaz, Professor, Department of EEE, BUET, Dhaka, Bangladesh. No. of participants: 38 M:25, F:18
- One day National symposium "She Marches On" in collaboration with CLIMB DTU and IEEE WIE Delhi Section on 10th July 2021 to celebrate International Women's day. The speakers were eminent women from diverse area. No. of participants: 55 M:5 F:50

5.13 Centre of Excellence for Electric Vehicles and Related Technologies (CoE for EVRT)

Organisational Structure:

Prof. Madhusudhan Singh	Coordinator
Prof. Pragati Kumar	Coordinator

The University has established a centre of excellence for Electric Vehicles and Related Technologies (CoE for EVRT) to impart training & research in thrust area of Electric Vehicles and Related Technology. The centre will help in developing an eco-system for transformation from a traditional to eco-friendly transportation system. State-of-the-art facility for training & testing will be created to carry out interdisciplinary research in Electric Vehicles and associated areas.

This Centre is jointly funded by Delhi Knowledge Development Foundation (DKDF), Govt. of NCT of Delhi and Delhi Technological University, Delhi. CoE for EVRT focused research areas will include, but not be limited to design, development, and analysis of electric vehicle motors and drives, charging station infrastructure, charge controllers, communication infrastructure for information dissemination between the power grid and EVs, battery management systems, retrofitting, etc. This Centre is not only providing interdisciplinary research and development ecosystems but also offering internships, skills development courses, entrepreneurship programs and facilitating industrial trainings for undergraduate/postgraduate students and research scholars. In addition, the Centre will also offer regular PG/certificate courses in the near future. The facility will strive for networking and collaboration with industries, research laboratories, and other institutions of excellence in India and abroad to carry out cutting-edge research and

development in EVs, along with offering postgraduate programmes.

Many faculty members of the Department of Electrical Engineering, DTU are already working in different areas related to electric vehicles technologies through various sponsored research projects. These islands of research endeavors and the expertise of the faculty members involved in them is being gainfully collaborated for development of CoE for EVRT. In a very short span, the CoE for EVRT has established a strong industry-academia collaborations to achieve the objectives of the centre. The main focus of the centre includes:

- Design, development, and analysis of cost-effective and sustainable Electric Vehicles prototype
- Design and development of battery packs and BMS for different types of Electric Vehicles
- Design, development, and analysis of Electric Vehicles motors and drives.
- Design and retro-fitment of conventional vehicles to Electric Vehicles.
- Design and development of electric vehicles charging infrastructure and grid management.
- To offer M. Tech and Ph.D. programs in the area of electric vehicles technology.
- To offer internship opportunities to the students of degree, diploma and certificate level institutions under Government of NCT of Delhi.
- Capacity building in terms of trained manpower at different levels such as technicians, supervisors and engineers in the area of Electric Vehicle technology.



6 Alumni Affairs

About Alumni Affairs

Prof. Rajesh Rohila, Dean, Alumni Affairs and Dr. Yasha Hasija, Associate Dean, Alumni Affairs

Under the esteemed leadership of Prof. Yogesh Singh, Hon'ble Vice chancellor of DTU; the main aim of alumni office is to closely in touch with alumni to understand how to engage the alumni network and job market in the benefit of our current students and at large the University and nation. Furthermore, alumni affairs office, DTU is a connecting link between alumni activities and DTU. DTU office of alumni affairs is also taking active participation in the alumni associations meet, arranging annual meet of golden and silver jubilee events, sponsorship programme for B.Tech, M.Tech. and Ph.D. students. Another work of this office is to enable alumni to understand the need of their alma mater in terms of sponsorship and infrastructure development. Furthermore, Alumni affairs

office is also updating the activities of alumni portal at DTU web page. In order to strengthen the alumni and to better connect with such a diverged flag bearers of the University, we are establishing many outreach efforts, for instance, over the years we have developed many databases, alumni affairs website, Facebook, LinkedIn and WhatsApp groups. Currently, we have American, European, Singapore, Middle East groups apart from national/local chapters of Bangalore, Delhi and Hyderabad. The outcome of our alumni accomplishments routinely published in the university news bulletin "DTU times". Our DCE DTU alumni association is very strong and active in arranging yearly Silver and Golden Jubilee alumni meet. After, that overseas chapter meets, several alumni visited their alma mater and many new initiatives have been started. Further, it also encouraged many alumni to donate/contribute funds for the development of their alma mater.

1. Grants for research projects sponsored by non-government sources such as industry, corporate house, international bodies, endowments, Chairs in the institution (INR in Lakhs).

- Received Passi Family Scholarship from 2021 onward.

2. Alumni contribution (Amount in Rupees)

Name of the alumnus/ alumni association	Year of graduation	Year of contribution	Quantum of contribution (INR)
Sh. Manmohan Singh Passi	1974	2021	7,32,902 (₹ Seven Lac Thirty Two thousand Nine Hundred Three Only)

3. Number of Alumni Association/Chapter meetings

Year	Number of alumni association meetings	Dates of meetings	No. of members attended	Total no. of alumni enrolled
2021	Meeting of Governing Council of DCE-DTU Alumni Association	24/3/2021	40	40

7 Outreach and Extension Activities

Board of Management in its 27th meeting on 23.2.2018 has approved the establishment of Center for Extension and Field Outreach at DTU. The role of the center is to extend knowledge and other institutional resources to the community and vice-versa and to gain insights from a contact between knowledge resources and socio-cultural realities with a view to reflecting these in the entire curricular system of higher education including teaching and research. It will be a two-way process between the experts and the people, an intellectual intervention in the community's living problems which need to be overcome through an educational process. It was to be that education which helped students to face life and its challenges and which created an ambience for a learning society.

Organisational Structure:

Prof. A. K. Srivastava	Dean
Prof. Nitin Puri	Associate Dean

AIM:

To promote a meaningful and sustained rapport between the University and the community.

Objective:

1. To extend knowledge and other institutional resources to the community and vice-versa.

2. To gain insights from a contact between knowledge resources and socio cultural realities with a view to reflecting these in the entire curriculum system of higher education including teaching and research.
3. To provide two-way process between the experts and the people.
4. To provide an intellectual intervention in the community's live problems.
5. To promote the philosophy of extension and outreach as a part of total education program.
6. To reach out to larger section of community specially deprived groups through extension.
7. To enrich the learning process of faculty and students mainly through extension activities.
8. The interest of the students should be considered for academic credit (1 or 2) in addition to or as a part of their regular course of studies.

Broad categories of Program:

1. Services to Schools and Colleges
2. Services to the Community
3. Services in the University Campus

Number of awards and recognition received for extension activities from Government/recognized bodies

Name of Activity	Name of the Award/ recognition	Name of the Awarding government/recognized bodies	Year of Award
Project "Desh ke Mentor"	Award of ₹ 2.17 crores	Directorate of Education, Govt. of NCT of Delhi	2021

Average percentage of students participating in extension activities with Government Organizations, Non-Government Organizations and Programmes such as Swachh Bharat, Aids Awareness, Gender issue etc.

- 50 no. of students participated in community services for social activities in year 2021.
- 600 Students participated under "Desh ke Mentor" scheme for mentoring the Delhi Govt. school student in 2021.

Number of initiatives taken contribute for local community

Name of initiatives to address locational advantages and disadvantages	Name of initiatives taken to engage with and contribute to local community	Date and duration of the initiative	Issues addressed	Number of participating students
Online Lecture in association with Unnat Bharat Abhiyaan on National Education Policy	Online lecture conducted for benefits of society at large	22.09.2020 (one hour)	National Education Policy	299
Internship Program has started with Delhi Police Providing B.Tech. students for imparting Basic Computer Training to Juveniles. The internship program is going on with DCP, Roohini District Office.	Counselling and Teaching basic computer knowledge to Juveniles	05.10.20 to 04.11.20 and (ii) 15.01.21 to 14.02.21	Educational and skill development	27 juveniles have attended it. 34 juveniles have attended it
Online meeting of HOS/ Principals of schools owned by Govt of NCT of Delhi regarding current academic scenario given the fact that our students used to go to schools for conductance of classes which halted due to covid-19	Online meeting with HOS/ Principals	20.01.2021 One hour	Educational and Academic	10
Visit of Energy Swaraj Foundation	Energy Swaraj Foundation	15.03.2021 One Hour	Solar energy	27
Laboratory on Wheels inaugurated on 6 th April, 2021 by Hon'ble Dy. Chief Minister of Delhi Sh. Manish Sisodia	Govt. of NCT of Delhi HoS/ Principals of schools of Govt. of NCT of Delhi	06.04.2021 One Day	Educational & Social	Approx. 500
An online webinar was conducted on the topic "Corona-Challenges & Solutions" in association with UBA	Covid-19 issues	06.06.21 One Hour	Health	230
An online webinar was conducted on the topic "Covid-19 की अवधी में स्वास्थ्य प्रबंधन (महिलाओं के सन्दर्भ में)	Covid-19 issues	13.06.21 One Hour	Health	163
An online webinar on Principale and working of oxygen concentrator with demonstration	Covid-19 issues	20.06.2021 One Hour	Health	104

8 International Affairs

Admission 2020-21

In the academic year 2020-21 the Office of International Affairs, DTU has admitted foreign national students from approximately 30 countries.

Organisational Structure:

Prof. Vishal Verma	Dean
Prof. Roli Purwar	Associate Dean

Prof. Raju Sarkar	Coordinator
Prof. Rahul Katarya	Coordinator
Dr. M. Jayasimtadri	Coordinator
Dr. Yashna Sharma	Coordinator
Dr. Sonal Thukral	Coordinator
Dr. Vivek Tripathi	Assistant Registrar

Total Foreign National Student Admitted in Academic Year 2020-21

Program	DASA		ICCR		DTU Portal		SII		Total		Total Admissions
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	
UG	51	11	62	16	1	-	7	1	121	28	149
PG	-	-	27	6	5	1	-	-	32	7	39
PhD	-	-	6	-	-	-	1	-	7	-	7
	51	11	95	22	6	1	8	1	160	35	195

Details of program organized for DTU International Students

S. No.	Program	Duration
1	Classes for bridge course on 12 th standard Mathematics and Physics for foreign national students coming to DTU (for B.Tech program) in the academic year 2019-20.	15.02.2021 to 14.04.2021
2	Providing Financial Assistance for aspiring student for international internship	

Details of program organized by Department of International Affairs:

S. No.	Program	Details of the Program	Date
1	n + i French Universities Education Fair	Interaction with students of DTU for informing them about the higher education opportunities available in France with Network N+i	19.10. 2020

S. No.	Program	Details of the Program	Date
2	Webinar for Charpak Master's scholarship 2021	For interacting and advising students on the following: 1. Scholarships. 2. Internships.	11.02.2021
3	Your 5 steps to the U.S Higher Education	Advising students on the following: 1. U.S admissions, financing your education, completing application process, applying for VISA and attending the pre departure orientation session 2. Q and A	12.02.2021
4	Webinar in association with Embassy of France	To orient the students about Higher Studies in France, more specifically in Engineering studies.	23.02.2021
5	Virtual Choose France Tour in association with Embassy of France	The event offered students and their parents the opportunity to e-meet various French Institutions- Specialized Schools, Engineering Schools, Public Universities, Art Schools and Business Schools.	26.02.2021 & 27.02.2021
6	Webinar in association with Embassy of France	An insight for the students into the curriculum, as well as all scholarship opportunities in France.	12.4.2021

International virtual visits of Officers of International Affairs for the purpose of branding and advertising the University

S. No.	Name of the Visitor	Name of the University	Date
1	Dr. Rahul Katarya, Dr. M. Jayasimhadri, Dr. Sonal Thukral & Ms. Sonika Dahiya	Alfa Beta INDIA Education Virtual Fair, Nepal	17 th August, 2020

MoUs

Numbr of functional MoUs with institutions of national, international importance, other Universities, industries, corporate houses etc, during 2019-20

S. No.	Organisation with which MoU is signed	Year of signing MoU	Duration	List the actual activities under each MoU year wise
1	Riga Technical University, Latvia, Europe.	2020	5 years	Knowledge sharing

9 Internal Quality Assurance Cell

The Delhi Technological University, Delhi has emerged as one the premier Technological institutions of our great country with state-of-the-art facilities, world class education, training, research and consultancy in the arena of engineering and technology, applied science and management and has become fully networked with industries on one hand and the academic and scientific community in the world on the other. As an internal mechanism for sustenance, assurance and enhancement of the quality culture of education, Delhi Technological University (DTU) has established the Internal Quality Assurance Cell (IQAC) for maintaining the momentum of quality consciousness.

DTU-IQAC, in fact, is conceived as a mechanism to build and ensure a quality culture at the University level to meet the diverse needs of the stakeholders. The DTU-IQAC is meant for planning, guiding and monitoring Quality Assurance and Quality Enhancement activities of the University. The IQAC channelizes and systematizes the efforts and measures of the University towards academic excellence and is a facilitative and participative organ of the University.

The DTU-IQAC is a driving force for ushering in quality by working out intervention strategies to remove deficiencies and enhance qualities.

Present structure of IQAC

Chairperson

- Vice Chancellor, DTU

Teachers to Represent All Level (Three to Eight) - Member

- Prof. Narendra Kumar, Dean Discipline & Professor EED
- Prof. Neeta Pandey, Professor ECE & TEQIP III Coordinator
- Prof. Rinku Sharma, Professor & HoD (Applied Physics)
- Prof. Amit Mookerjee, Professor & HoD, USME
- Prof. Gurjit Kaur, Professor, ECE
- Prof. Girish Kumar, Professor, MED
- Dr. Shilpa Pal, Associate Professor, CED
- Mr. Yashdeep Singh, Assistant Professor, DSM

One Member from the Management - Member

- Prof. I.K. Bhat, Member BOM, DTU & Vice Chancellor, Manav Rachna University, Faridabad, Pin code - 121004

Few Senior Administrative Officers - Member

- Prof. Madhusudan Singh, Registrar
- Sh. Kamal Pathak, Controller of Examination
- Sh. D.P.Diwedi, Consultant Finance & Planning

One Nominee Each from Local Society, Students and Alumni - Member

- Sh. Arun Gupta, Alumni, C-10/6, Ground floor, Near Vidhya Bharti School Sector-15, Rohini, Delhi
- Mr. Rutvik Warker (2k19/CH/09)
- Sh. Akhil Chaudhary, Founder Chairman Binary Semantics Ltd and CEO & Managing Partner, Vaco Binary Semantics LLP.

One nominee each from Employers / Industrialists/Stakeholders - Member

- Mrs. Seema Gupta, Director operation power grid corporation of India Gurugram

One of the senior teachers as the coordinator/ Director of the IQAC – Member Secretary

- Prof. Nirendra Dev, Director, IQAC

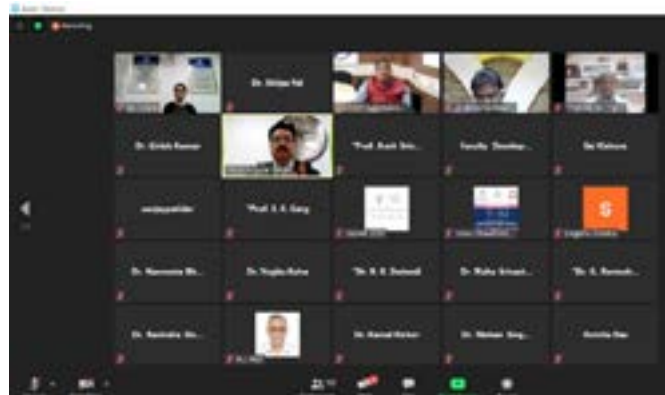
Activities under IQAC

Major Works of Internal Quality Assurance Cell (IQAC) can be summarized as:

- a) Development and application of quality benchmarks/parameters for the various academic and administrative activities of the University.
- b) Facilitating the creation of a learner-centric environment conducive for quality education and faculty maturation to adopt the required knowledge and technology for participatory teaching and learning process.
- c) Arrangement for feedback responses from students, parents and other stakeholders on quality-related institutional processes.
- d) Dissemination of information on the various quality parameters of higher education.
- e) Organization of inter and intra institutional workshops, seminars on quality related themes and promotion of quality circles.
- f) Documentation of the various programmes/activities of the College, leading to quality improvement.
- g) Acting as a nodal agency of the college for coordinating quality-related activities, including adoption and dissemination of good practices.
- h) Development and maintenance of institutional database through MIS for the purpose of maintaining / enhancing the institutional quality.
- i) Development of the Annual Quality Assurance Report (AQAR) of the College based on the quality parameters/assessment criteria developed by the relevant quality assurance body (like NAAC, NBA, AB) in the prescribed format.

- j) Bi-annual development of Quality Radars (QRs) and Ranking of Integral Unites of Colleges based on the AQAR.
- k) Interaction with SQACs in the pre and post accreditation quality assessment, sustenance and enhancement endeavours

International Summit on Quality Indices in Higher Education, November, 2020



NBA Visit 2020



Responsibilities and authorization of IQAC

- a) Preparation and control of quality system documents
- b) Organizing training in quality system, ensuring that the employees understand the quality policy, objectives and working of the installed quality system.
- c) Planning and implementation of internal quality audits.
- d) Maintaining the quality system & reporting on its functioning; implementation of all corrective and preventive actions
- e) Liaison with the external agencies/bodies on matters related to quality system.
- f) Arranging for Management Reviews.
- g) Maintenance of Records of the operative Quality System and its constituent documents.
- h) Holding Management Review Meetings and updating the Quality System.
- i) Coordination all Quality initiatives such as NAAC, NBA, QS ranking etc. on behalf of the University.
- j) Feedback collection from students and other stakeholders and its analysis.

IQAC is committed to

- a) Ensure clarity and focus in institutional functioning towards quality enhancement.
- b) Ensure internalization of the quality culture.
- c) Ensure enhancement and coordination among various activities of the institution and institutionalize all good practices.
- d) Provide a sound basis for decision-making to improve institutional functioning.
- e) Act as a dynamic system for quality changes in HEIs.
- f) Build an organized methodology of documentation and internal communication.



10 TEQIP-III Project

Brief Introduction and Objective

Delhi Technological University has been selected as Mentor Institute for the TEQIP-III Project for Mentee Institute is Madhav Institute of Technology and Science, Gwalior is w.e.f. April 1, 2017 to September 30, 2021.

The institute is covered under Sub-component 1.3: Twinning Arrangements to Build Capacity and Improve Performance.

The Competent Authority of the University is assign the responsibility to following faculty/officer for execution of TEQIP-III Project:

Shri Jasbir Singh, Nodal Officer (Finance).

Organisational Structure:

Prof. Neeta Pandey	Coordinator
Prof. A. K. Srivastava	Nodal Officer (Procurement)

Prof. Raj Kumar Singh	Nodal Officer (Academic)
Shri Jasbir Singh	Nodal Officer (Finance)
ms. Kiran	Stenographer
Ms. Neha Sharma	Accountant
Mr. Brajesh Kumar	MIS Operator
Mr. Kuldeep	Attendant

Finance Details:

The Project Life Allocation (PLA) of TEQIP-III Project, Delhi Technological University has been re-instated of curtailed funds i.e. 5.67 Cr. to original PLA (7 Cr.) on 29th September, 2020.

Indicative Category-wise Funding for Key Activities under Sub-component 1.3 under TEQIP-III Project.

Revised PLA received on 29th September, 2020.

S. No.	Activities	Category of Expenditure (Head of expenditure)	Percentage (%)	Cost (In ₹)
1.	Procurement of Goods (equipment, furniture, books LRs, software and minor items) and minor civil works for improvement in teaching, training and learning facilities	Procurement	Upto 50%	3,50,00,000/-
2.	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 Individual institutional mentors	Academic	At least 40%	2,80,00,000/-
3.	Incremental Operating Cost	IOC	Upto 10%	70,00,000/-

NOTE: The total expenditure is ₹6,80,62,861/- upto 30th September, 2021 (97.23% of 7 Cr. PLA) under TEQIP-III Project, DTU.

Remedial Classes/lectures and other various activities for students:

1. Employability Test for UG students of DTU for the academic year 2020-21 has been conducted twice on 30.12.2020 & 30.01.2021.
2. GATE Exam-2021 was conducted under Centre for Competitive Examinations (CCE).

Research Assistantship:

The Hon'ble Vice Chancellor, DTU has approved to give research fellowship to the Ph.D. candidates' in each academic department (imparting Engg./Tech. degree program) on semester basis who shall admit from the session of July, 2018 through TEQIP-III Project fund. The following students have been taken fellowship from July, 2018 till September, 2021 is as under:

S. No.	Application No.	Name of the applicant	Category	Name of the Department
1.	1820227	Ms. Garima Singh	OBC	Electronics & Communication Engg. Deptt.
2.	1821736	Mr. Sunil Kumar	Gen	Biotechnology Department
3.	1821220	Mr. Ajeet	Gen	Civil Engineering Department
4.	1820476	Ms. Chitrakshi	ST	Environmental Engineering Department
5.	1821913	Ms. Vidushi	Gen	Computer Science & Engineering Department
6.	1820454	Ms. Radha Sachan	Gen	Information Technology Department

Trainings and Development

1. Prof. S.K. Singh Professor, Environmental Engg. Deptt. has attended (ONLINE) Professional Development Training (PDT) at IIM Kozhikode during 25-30 January, 2021 conduct by NPIU.

Essential Approvals:

1. Dr. M. Jayasimhadri Assistant Professor, AP Deptt has appointed as Sub-Nodal Officer for NIC CPP e-procurement portal.

Procurement Activity:

- A software "Wind River Workbench" has been purchased in Electrical Engineering Department.
- An equipment "FLUKE Three phase Power Quality Analyzers 4 Channel 400

kiloWatt" has been purchased in the Department of Electrical Engineering.

- An equipment "Dell Workstation with Intel Core i9 10900K Processor 32 GB" has been purchased in the Department of Applied Physics.
- An equipment "Dell Workstation with Intel Xeon Silver 4214 Processor 128 GB" has been purchased in the Department of Applied Physics.
- An equipment "Dell Workstation with Intel Xeon W-2255 Processor 128 GB" has been purchased in the Department of Information Technology.
- An equipment "GLOBUS Professional Large Format Display Size 189 cm Touch Screen" has been purchased in the Department of Applied Mathematics.

- An equipment “Kyocera ECOSYS M5521cdn” has been purchased in the Department of Applied Mathematics.
 - An equipment “IKA LCD with Colour Graphic Display Rotary Evaporator, Capacity 4 litre” has been purchased in the Department of Applied Chemistry.
 - An equipment “PAREX SCIENTIFIC WORKS Movable with wheels Recirculating chiller, Capacity 13 lpm” has been purchased in the Department of Applied Chemistry.
 - An equipment “KHERA 1000 Watt More than 200 Litres Hot Air Oven” has been purchased in the Department of Applied Chemistry.
 - An equipment “Acer Intel Core i7 10700 16 GB/1000 GB HDD/Windows 10 Professional (Veriton S 2670G)” has been purchased in the Department of ECE.
 - An equipment “Dell Workstation with Intel Xeon Silver 4216 Processor 64 GB” has been purchased in the Department of ECE.
- CSE & IT Department on 28th November 2020.
4. MITS, Gwalior has organized online Second International Conference on “Sustainable and Innovative Solutions for Current Challenges in Engineering & Technology” during December 18-19, 2020 in twinning arrangement with Delhi Technological University (Prof. Mukhtiar Singh, Professor, Delhi Technological University was in General Chair Committee).
 5. Department of Mechanical, Automobile and Production & Industrial Engineering and Centre for Energy and Environment of DTU has organized second international conference on “Recent Advances in Mechanical Engineering” during September 18-19, 2020 in twinning arrangement with MITS, Gwalior. Details of contribution are as follows:
Dr. C.S. Malvi - Conference Coordinator
PhD Scholars - 03
Paper published - 03
Session Chair - 1 Professor: (Dr. C. S. Malvi)
Paper Reviewed on Easy Chair - 06

Twinning Activity:

1. MITS, Gwalior is organizing International e-workshop on “Thermal Performance and Modelling of Heat and Flame-Resistant Materials” in collaboration with DTU on January 29-30, 2021.
2. Mechanical Engineering Department, MITS Gwalior is organizing a FDP on “Renewable Energy Sources and Future Energy Needs from February 15-19, 2021. This FDP will be TEQIP - III sponsored. As DTU is Twinning partner under TEQIP-III.
3. Dr. Dinesh Kumar Vishwakarna, Professor Department of Information Technology, DTU have participated and give suggestions in Board of Studies of
6. Ms. Bhavana Sharma, Assistant Professor from department of Electrical Engineering, MITS has worked with Dr. Vishal Verma as Co-Principal Investigator, Professor, Department of Electrical Engineering, DTU under Collaborative research project of TEQIP-III.
7. Mr. Rakesh Narvey, Assistant Professor in Department of Electrical Engineering, MITS Gwalior enrolled in PhD programme, DTU under Twinning arrangement with DTU on September 2020 & also cleared the course work.

8. Two faculty members from MITS namely Mr. Kuldeep Kumar Swarnkar (Assistant Professor) in Electrical Engineering Department and Mr. Vaibhav Shivhare (Assistant Professor) in Mechanical Engineering Department joined DTU in part time PhD programme at Delhi Technological University under Twinning arrangement.
9. Mr. Saket Gupta, PhD Research scholar of DTU has working under Dr. Laxmi Srivastava, Professor & Head, EED, MITS Gwalior as Co-Guide.
10. Delhi Technological University has organized International Summit on Quality indices in Higher Education on November 6-7, 2020 in virtual mode under twinning arrangement with MITS, Gwalior.
 - 17 Faculty members of different departments of MITS, Gwalior have actively participated in the event.
 - Dr. Manjaree Pandit, Dean Academics MITS, has also delivered an expert talk on Accreditation system on November 7, 2020.
11. Dr. Mukhtiyar Singh, Professor, Department of Electrical Engineering has participated as external expert in Board of Studies (BoS) of Electrical Department, MITS on November 28, 2020 (In Virtual mode).
12. Delhi Technological University has organized an awareness cum interaction event namely "Saarathi - The Way Forward" on 31.01.2021 at 12:00 to 01:00 PM under twinning arrangement TEQIP-III with MITS, Gwalior.

The following student coordinators of the DTU-NSS unit were the speakers for the event:

1.	Praveen Kumar	General Secretary- Administration, Logistics & Road Safety
2.	Prateek Mudgal	General Secretary- Rural Development, Health and Women Empowerment
3.	Rachna	General Secretary - Health and Women Empowerment, Rural Development
4.	Mohammad Zubair	General Secretary - Public Relations and Corporate Department

Total 66 students from MITS, Gwalior have participated in the event.

Reports Submission and Participation

1. Financial Management Indicators for the following period:
 - F.Y. 2020-2021 (01.04.2020 to 30.09.2020, 01.10.2020 to 31.12.2020 & 01.01.2021 to 31.03.2021)
 - F.Y.2021-22(01.04.2021to 30.06.2021) have been successfully submitted.
2. Internal Audit & Statutory Audit for the F.Y. 2020-21 have been successfully completed.
3. Internal Audit & Statutory Audit for the F.Y. 2021-22 (period ended 30th September, 2021) have been successfully completed.
4. Performance Benchmark target June, 2020 & September, 2020 has been submitted to NPIU on 1st August, 2020.

Audit and Visits

1. Third round of Performance Audit (ONLINE) has been completed by Prof. V.M. Gadre, IIT Bombay during February 16-18, 2021 (DTU has been placed among best performing institution).

11 Sponsored Research, Consultancy and Projects

Organisational Structure:

Prof. Ashutosh Trivedi	Dean
Prof. Ruchika Malhotra	Associate Dean

Sponsored Projects

S. No.	Name of the P.I	Agency	Govt/Non Govt.	Department	Year	Total Cost of the Project (in ₹)	Name of the P.I	Agency
1	Prof. Jai Gopal Sharma	DST	Govt.	Biotechnology	2020-2021	₹ 2077229	Prof. Jai Gopal Sharma	DST
2	Dr. Rahul Katarya	DST	Govt.	CSE	2020-2021	₹ 12,51,000	Dr. Rahul Katarya	DST
3	Prof. Rajeev Kapoor	AICTE	Govt.	ECE	2020-2021	₹ 10,88,431	Prof. Rajeev Kapoor	AICTE
4	Dr. Simran Bhullar	DBT	Govt.	Biotechnology	2020-2021	₹ 113.60 Lakh	Dr. Simran Bhullar	DBT
5	Dr. Rashmi Kataria	SERB	Govt.	Biotechnology	2020-2021	₹ 53,23,610	Dr. Rashmi Kataria	SERB
6	Dr. Shilpa Pal	NDMA	Govt.	Civil Engineering	2020-2021	₹ 116.224 lakh (DTU Share ₹ 15 lakh)	Dr. Shilpa Pal	NDMA

Consultancy Projects

S. No.	Name of the P.I	Name of the Consultancy	Name of the Department	Date	Total Cost of the Project (in ₹)
1	Dr. Ritu Raj	Upgradation and construction of an additional multi story building in the premises of forensic science laboratory, rohini, delhi.	Civil Engineering	2020-2021	1,18,000/-
2	Dr. Ritu Raj	Requesting for proof checking of 300 telecom sites.	Civil Engineering	2020-2021	1,18,000/-
3	Dr. Ritu Raj	Structural vetting of swimming pool within premises of government sarvodya kanya vidyala No.3, Mandawali Delhi	Civil Engineering	2020-2021	59,000/-
4	Dr. Ritu Raj	Proof checking of Utsav stal and culverts, drains	Civil Engineering	2020-2021	59,000/-
5	Dr. Ritu Raj	Vetting and structural safety of building (G+I)	Civil Engineering	2020-2021	70,800/-
6	Dr. Ritu Raj	Structural audit to make building seismically complaint	Civil Engineering	2020-2021	3,26,860/-
7	Dr. Ritu Raj	Proof checking of the structural design of service block at vithal bhai patel house, Rafi Marg, Delhi	Civil Engineering	2020-2021	1,18,000/-

S. No.	Name of the P.I	Name of the Consultancy	Name of the Department	Date	Total Cost of the Project (in ₹)
8	Dr. Ritu Raj	Construction of mother and child block and screening OPD block at Dr. Baba Sasheb Ambedkar Hospital at Rohini	Civil Engineering	2020-2021	2,36,000/-
9	Prof. Narendra Kumar-I	Third party quality checking of the electrification work at CETP by 6.00 MLD, (Phase-I), Apparel Park at Trans. Delhi, Signature City, Ghaziabad	Electrical Engineering	2020-2021	56,96,440/-
10	Prof. Narendra Kumar-I	Third party quality checking of the electrification work at providing 70W LED light fitting at IA, Bulandshahar Road, Ghaziabad	Electrical Engineering	2020-2021	64,26,923/-
11	Dr. Archana Singh	Impact Analysis for NIELIT O & A Level Courses and Certificate Course in Office Automation	DSM	2020-2021	6,41,900/-
12	Dr. Archana Singh	Impact Analysis of Enhancement of Livelihood activities for SC Candidates of Delhi, NCR through capacity Building Using ICT	DSM	2020-2021	2,99,720/-
13	Prof. Narendra Kumar-I	Third party quality checking/inspection of DG-Set, 625Kva for 6.0 MLD CETP at Apparel Park, TDS City Ghaziabad	Electrical Engineering	2020-2021	1,00,000/-
14	Dr. Shilpa Pal	Third Party Quality Assurance (TPQA) constructiong of mothers and child block and screeing OPD Bloack at, Dr. B. S. Ambedkar Hospital, Delhi	CED	08.10.-2020	36,74,600/-
15	Dr. Shilpa Pal	Third Party Quality Assurance (TPQA) for the work 1. Construction of 40 three BHK with servant room and 60 two BHK house on design and build basis adjoining to community Hall at Masoodpur, Sector – B, Vasant Kunj, including internal as well as external development and electrification , USR's, STP, ESS etc entire pocket (A Turnkey Project) 2. Construction of 760 three BHK, 111 two BHK and 76 EWS houses on design and build basis adjoining to Pocket D-6 at Vasant Kunj, including internal as well as external development and electrification , USR's, STP, ESS etc entire pocket(A Turnkey Project) 3. Construction of 156 three BHK, 220 two BHK and 116 EWS houses on design and build basis adjoining to Pocket D-7 & D-8 at Vasant Kunj, including internal as well as external development and electrification , USR's, STP, ESS etc entire pocket(A Turnkey Project)	CED	20.12.2020	1,13,69,200/- (amount of consultancy charges department with DTU)

12 Student Societies

12.1 Entrepreneurship Cell

Techstars Startup Weekend powered by Google for Startups

The Entrepreneurship Cell of Delhi Technological University organized its annual 'Techstars Startup Weekend' powered by Google for Startups from 23rd to 25th October 2020.

Startup Weekend provides a platform that allows the early stage Startups to take giant leaps in the business world and lay the foundation of their dreams with like-minded people. The participants are expected to turn their idea into reality in 54 hours.

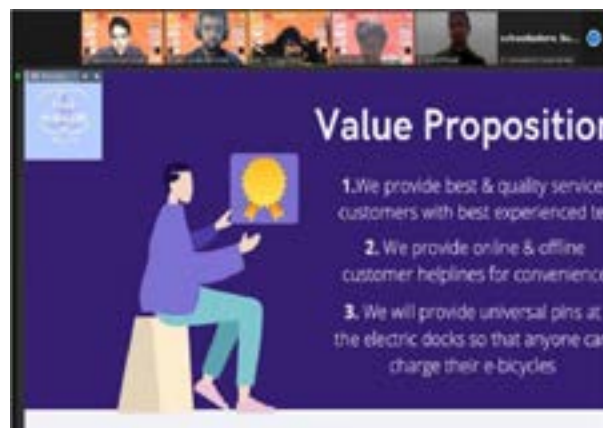
The top startup ideas were awarded incubation support, AWS Credits, certified hampers, and goodies, along with investment and incubation opportunities to kickstart their entrepreneurial journey.

Our esteemed panel of judges – Mr. I.P. Singh (Addl. Chief Adviser- Min. of Finance, Govt. Of India), Mr. Anil Bhasin (President, Havells), Mr. Anjan Gupta (VP, Morgan Stanley), Mr. Vikramjeet Singh (President and CHRO, Bajaj Allianz Gen. Insurance), Mr. Satyam Manohar (Director, Ola), Mr. Vivek Abraham (VP and Global Outreach Head-INVEST INDIA) and Mr. Alok Tiwari (Director and Country Head, one.com).

They carefully reviewed the ideas, pitches, and presentations of the teams and provided their expert guidance to bring the best out of the finalists.

Participants were given a chance to be a part of this extravagant affair which immersed them in the ideal environment, where they discovered their inner self, experienced the highs and lows of a startup journey, and unleashed their maximum potential.

Techstars Startup Weekend powered by Google for Startups



Niyo presents Entrepr-On-Air powered by Verzeo

E-Cell DTU, for the past 12 years has been advocating the spirit of being a 'CREATOR' by providing the students the right guidance and mentorship.



Niyto presents Entrepr-On-Air powered by Verzeo is an initiative by Entrepreneurship cell, DTU. We aim to bring to our audience light-hearted yet informative podcast sessions by some of the biggest names of the business industry. Gear up to hear some of the best, most inspiring, and engaging personal anecdotes from the best of the industry.

In the first episode of Entrepr-On-Air - a podcast conclave, we have Mr. Yashish Dahiya (Co- Founder and Group CEO of Policybazaar). Mr. Dahiya completed his engineering from IIT Delhi and further



did his MBA from IIM Ahmedabad. He reminisces about his engineering days, shares funny anecdotes, and talks about how he mostly indulged in sports activities and extracurriculars.

The dynamic business tycoon talks about his fitness regime and how he completed the Ironman Triathlon in Sweden. He narrates his take on investments, mutual funds, startup evaluation, and a diversified approach to invest in stocks. He talks about the turning points in his life and what inspired him to perceive the way of life financially and economically.



Our Guests for the Podcast were as follows:

1. Mr. Nikhil Kamath: Co-founder and CIO, ZERODHA
2. Mr. Yashish Dahiya: Founder, Policybazaar
3. Mr. Shwetabh Gangwar: YouTuber
4. Dr. Sanjeev Gemawat: ED and Company secretary, Dalmia Group
5. Mr. Mihir Desai: professor, Harvard Business School
6. Mr. Vaibhav Lodha: co-founder, Ftcash
7. Shefali Bagga: Public Figure and Anchor

8. Mr. Ankit Mehrotra: Founder & CEO, Dineout
9. Mr. Karan Tacker: Actor
10. Mr. Vinay Bagri: CEO and Co-Founder, Niyo

MLH Execute Hackathon presented by Medicento

E-Cell DTU in collaboration with MLH hosted 'EXECUTE – The Largest Digital Hackathon of India' and imbibed the vision to empower the Hackers.

Major League Hacking (MLH) is a New York-based official student hackathon league. Every year, they power innumerable competitions that inspire innovation, cultivate communities, and teach computer science skills to more than 65,000 students around the world.

MLH is an engaged and passionate maker community, consisting of the next generation of technology leaders and entrepreneurs.

Execute provided the essential platform for those who strive to create a change in society through the out of the box ideas, zeal and ardor.

It was one-of-a-kind experiences for amateurs, professionals, and most importantly hustlers.

DAY 1

• INAUGURATION

The Hackathon was inaugurated by the esteemed dignitaries, after which an overview and guidelines of the event were announced. The 'execution' of transforming ordinary into extraordinary commenced.

• READY.SET.HACK

The problem statement was released and the hackers started their vigorous brainstorm session. The official theme of Execute Hackathon 2020 was

“Innovation in Healthcare” [Category: HealthTech] or “Special emphasis is given on the logistics and supply chain of medical equipment (COVID Vaccine)” [Category: MedTech]

• WORKSHOPS

At night there were fun activities and game nights for the hustlers to pause and recharge themselves. Informative workshops were conducted to hone and polish the skillset of the hackers.

DAY 2

• THE ENDGAME

The competition will reach its final stage – the endgame when the ideas were further shortlisted.

• PRESENTATION

The top 10 ideas reached the finale presented their idea in front of the esteemed panel of judges.

The judges were – VALERIA SADOVYKH, Emerging Technology Global Delivery Lead, PwC Labs, SOUMITRA LIMAYE, Director, Digital Technology Lab, IBM Software Labs, AJAI GARG, Sr Director at Ministry of Electronics & Information, PRADEEP JHUNJHUNWALA, Director – Partner Technology at Microsoft and NITINRAJ, Director at KPMG India.

The judges carefully scrutinized the ideas and presentations of the teams and finally, the winners were announced.

The winners of the Hackathon were:

1st – PDS Assistant 2nd – Schizo FRIENDia 3rd – JEEVAN – Organ Donation and Stem Cells Blockchain Ledger

The winners won exciting cash prizes worth ₹ 50,000, goodies from MLH and our sponsors.



Judges of the hackathon



Website of the hackathon



Product Screenshots



Winners of the MLH Execute Hackathon



**Entrepreneurship
March 2021**

Workshop

The objective of this 2-hour workshop organized by E-Cell DTU was to foster the spirit of entrepreneurship among the students and participants. The aim was to educate the students about “how to make it big during your college years, the role of innovation in our society and impact of starting up early”. We recognize entrepreneurship as a key element of transformation for India heading into the next decade of growth. This would not only create value in terms of economic wealth but also be a trigger for job creation and is a path that is needed for solving the myriad challenges that prevent India from reaching its potential. Thus, we

provided an environment that promoted entrepreneurship as a tool for developing India. This was intended to be achieved through knowledge delivery, mentorship, and market access that would enable entrepreneurs to scale and inspire students on the path of entrepreneurship.

The objective of the workshop was to give the student a framework and some tools for evaluating an entrepreneurial venture and for constructing a plan to pursue the opportunity. This workshop facilitated the students to gain insights into the industry straight from the industrial experts.

The workshop aimed to cover the following topics in detail:

- To understand Entrepreneurship and its journey.
- How to generate Entrepreneurial Idea(s).
- how to make it big during your college years
- the role of innovation in our society
- impact of starting up early
- How to make a good business proposal.
- Exercise - How to make a good business model around the Idea

Through “Entrepreneurship Workshop” we wanted to indulge the students in the challenging, rewarding, and mesmerizing world of Entrepreneurship. The event was graced by 4 highly acclaimed speakers including Mr. Anuj Batra (Director, Abbstrat), Ms. Reetu Raina (CHRO, Quick Heal), Mr. Vijay Srivastava (Founder, IAEGlocal), Ms. Diksha Nigam (Manager, Invest India, National Investment Promotion And Facilitation Agency). The speakers interacted with the students and young entrepreneurs.

The students got to know about various sectors and industries where potential gaps and problems exist. The speakers

enlightened them about the prospective road map and various government schemes and private aid available to help them in their journey. The students were curious to know about the various domains and departments of the start-up industry and the speaker panel quenched their curiosity with appropriate answers supported by facts and data. The speakers also shared some relevant stories and personal anecdotes for the participants to know about their journeys and connect and relate to them better.

SPEAKERS

1. Mr. Anuj Batra

Mr. Anuj Batra (Chief Business Strategist and Director, Abbstrat Partners) is an innovative thinker and a versatile leader with more than 25 years of solid track record of Leading and managing start-ups, turnarounds, and rapidly growing companies, and establishing brands, in diverse Business verticals- Retail/e-Commerce, Hospitality, Real Estate -representing Indian & International brands and companies at board level positions.



He is a strategic & creative leader with proven ability to dream, create value, conceptualize strategies, launch

brands, devise & lead marketing activities, negotiate JVs & alliances, catapult sales, spearhead operations, develop products & services, raise & manage funds, Inspire, recruit, train & retain talent and create a culture of shared vision, goals, continuous process improvement, dedication and performance accountability.

2. Ms. Reetu Raina

Catch Ms. Reetu Raina (CHRO at QuickHeal) pioneered the practice of Adaptive leadership in India and was invited by ECUF (Evolving Corporate Universities Forum) in Singapore to present the same. She is also pivotal in the design creation of the Leadership Resource Council (LRC) for NASSCOM in partnership with IIM-B.



Having spent 19+ years in senior HR Leadership roles focusing on HR transformation Workforce Planning building efficiency and process re-engineering for Org effectiveness, Ms. Reetu has lead employee experience using Design thinking as a Key Methodology Performance management, Organizational Structure, and Change management. Cross-industry and culture exposure aided

Ms. Reetu to bring versatility in her thought process which resulted in value creation for the organizations.

3. Ms. Diksha Nigam

Ms. Diksha Nigam (Manager, Startup India Hub-Invest India) is an experienced professional with a demonstrated history of working in the government relations industry. Skilled in Microsoft Word, Market Research, Management, Microsoft Excel, and Data Analysis. Strong professional with a Master of Science (MSc) focused in Agribusiness Economics from Gokhale Institute of Politics and Economics.



Ms. Diksha Nigam is Manager at Startup India. Startup India is a not-for-profit flagship initiative of the Government of India, intended to build a strong ecosystem for nurturing innovation and startups. The Hub has been appointed to be the single point of contact for the entire startup ecosystem, enable the exchange of knowledge among various stakeholders, and facilitate access to funding. Thus, the mandate of the Hub is to provide end-to-end facilitation to startups in terms of mentoring, government regulations, etc.

4. Mr. Vijay Kumar Srivastava

Mr. Vijay, is the Founder & Social Imagineer of the Indian Academy of Entrepreneurship® (IAEGlocal.com), a world-class institution with its Head Quarter in Gurgaon (HR), India.



IAEGlocal.com is a Business and Start-Up incubator driving the mission and movement of "Dignified Livelihood Solutions - DLS" on the foundations of "Entrepreneurship (E-Ship) & Employability (E-Ability)". This mission is in line with Sustainable Development Goals (SDGs) of UN Charter 2015 to meet Agenda 2030 through "Collaborative Innovation" & "Social Technology".

IAEGlocal.com is all set to embrace the world through its global operation by on-boarding Chapter Heads, Co-Founders, Individual & Institutional Members from India and around the world. We are scouting for more individual(s) and institutional partner(s) to collaborate to keep working on the vision of "NURTURE INNOVATION & ENTREPRENEURSHIP".



12.2 Sports Council

Introduction

Physical education & sports play vital role in achieving the aims and objectives of Education. The students of DTU are provided with excellent facilities and encouraged to take part in the tournaments held in and around N.C.R. Delhi, , particulars, engineering institutions.

DTU is having 450 m. track, ground for Football, Hockey, Cricket, two courts for Volely ball, two courts for basketball, three courts for Tennis I and five courts for Badminton, Table Tennis rooms, Chess Rooms, Carrom Rooms and Gyms are also available in the each hostel of the college campus.

With the view to recognize upcoming talented sportsman and sports woman in the college, the Sports Council organizes sports festival ARENA. The festival witnesses the large participation of boys and girls which included atheletics, badminston, table tennis, basketball, carrom, chess, cricket, tennis and volleyball. Prizes and certificates were awarded to the winners.

The sports year also involves the organization of the Inter Hostel Tournaments in various games i.e. badminton, basket ball, carrom, chess, cricket, football, table tennis, volleyball and tennis. Foundation Elective Course (FEC) - Sports course first time started in the university in the academic session 2018-19 for the students of DTU with two credits for each semester.

FEC - Sports DTU provides various games i.e. Athletics, Badminton, Basketball, Cricket, Football, Handball, Kabaddi, Table Tennis, Lawn Tennis, Volleyball, coaching/ training facilities alongwith the curriculum of sports activities for the students. There

were 486 students enrolled for sports FEC course during Odd sememter of 2018-19 and for the Even semester, 481 enrolled for the said course.

New Year Celebration Cricket Match



New Year Celebration Cricket Match was organized by DTU Sports Council on the 31st December 2020 at DTU Sports Complex as a part of New Year Celebration. Hon'ble Vice Chancellor, Prof. Yogesh Singh was the Chief Guest of the event and his presence made the celebration glamorous.



A cricket match was organized between faculty and the students, wherein everybody relished moments of camaraderie during

the afternoon. The event also promotes the importance of Physical Education and Wellness in an individual's life. The sporting events have their own importance in DTU. They aim to inculcate the good understanding among the students and employees apart from residents. The match was played between the Vice Chancellor's XI and the DTUite's XI. Both the faculty members and the student's team had a very enormous enthusiasm.

Being active and playing sports helps people be healthy at any age. Some of the health benefits of playing sports include the efficient functioning of the heart, controlled diabetes, lower cholesterol levels, improved blood circulation, lower hypertension, and lower stress levels. In addition, sports help in weight management, by toning our muscles and strengthening our bones.

PARAAKRAM

23-30 January, 2021

The Students Sports Council successfully organised the "Paraakram" event, held on 30th January 2021 at Sports complex, DTU. Professors were organized into teams and had to compete amongst each other in nail biting contests of sporting events which included volleyball, football, cricket and various other field sports.

The Student Members of the DTU Sports Council presented some members with awards for their exemplary performance.

Flag off was given by Hon'ble Vice Chancellor Prof. Yogesh Singh. The event was also graced by the presence of Chairman Sports Council – Prof. R.C. Singh, Director of Physical Education and Sports – Dr. A.K. Srivastva, Vice Chairman Sports Council

– Prof. Rajiv Chaudhary, and other faculty members. All the participants were offered participation certificates along with the refreshments.

With the ongoing pandemic and days of sitting back home, the students and professors found it to be a refreshing and exuberating experience.

(Chief Guest Hon'ble Vice Chancellor, Prof. Yogesh Singh)



PANDEMIC FITNESS RUN

The Student Sports Council of DTU organized a "Pandemic Fitness Run" for the students of DTU on 2nd March 2021 at the DTU Sports Complex. This unprecedented situation has made all of us lethargic and keeping up with our physical health has become a major task. The pandemic fitness run aims to promote the importance of physical fitness in this pandemic situation and rejuvenate all the students after a long fitness break. The chief guest of the event was our Hon'ble Vice Chancellor Prof. Yogesh Singh. The event started when everyone paid their respects to our prestigious national anthem. Around 800 students participated in the race. There were different track routes designated for boys and girls and the length of the race

for boys and girls are 4.5 km and 2.5 km respectively in the university premises.

The races commenced with our esteemed chief guest Hon'ble Vice Chancellor Prof. Yogesh Singh giving a few inspirational and motivational words to the aspiring runners. Holistic development of a student is possible only when he/she is physically fit and emotionally balanced.

The zeal and enthusiasm encouraged the students to complete the entire race. Students were gripped with a feeling of anxiety and nervousness although some runners achieved triumph; others were still satisfied with their attempt to complete the entire marathon. None of the students were injured and the run was a success.



12.3 Dean Student Welfare

The Dean of Student Affairs handles all matters related to student life. The student activities are the essence in students' life while in the University campus. Delhi Technological University offers a large number of extracurricular activities and a student can find an interest group corresponding to almost any extracurricular activity. The Dean Student Welfare Office facilitates the students to undertake various activities of their interest. The entire work of student activities is being governed by various provisions of the Act, Statutes, Ordinances and Rules & Regulations made therein by the authorities of the Delhi

Technological University established by Govt. of NCT of Delhi vide Act of 6 of 2009.

Dean (Student Welfare): Prof. S. Indu

Associate Dean (Student Welfare): Prof. Ram Singh

12.3.1 Technical Societies

The technical societies help the students to explore their hidden talent. This further helps them in their personality development and inculcating the spirit of organization management by providing them with a platform for hosting their talents. The following technical societies are working in the campus:

IOSD-DTU	ASCE	DEPTH	D-CODER	ROUND TABLE
IGTS-DTU	SME	ZENITH	STI	INNOVA
ASSESTS	MACS	IICHE	SSE	DTU CONSULTING GROUP
CSI-DTU	SAE	SCEE	SITE	SIAM
JIJNASA	SES	IMECHE	COSMOLOGY CLUB	IET
OPTIMA	SR		KARYON	TATVA

Cosmology Club (DTU)

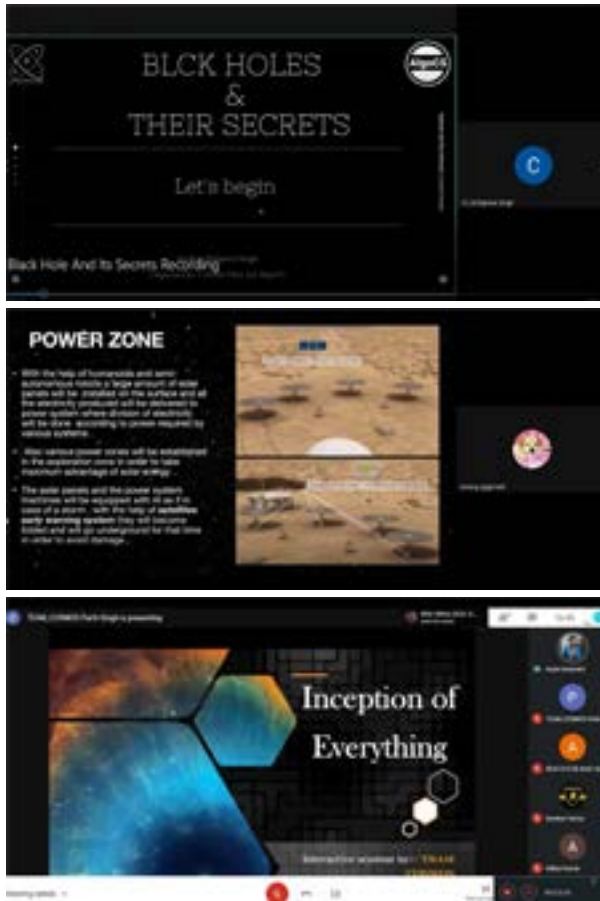
The duration of the Hackathon was 6 days in which teams were challenged to create a foolproof plan for colonization on Mars, including construction, food supply, maintenance, disaster management, and all other necessities of life. The winners were awarded a certificate and discovery plus subscription of 1 year whereas runners-

up were also awarded a discovery plus subscription of 1 month.

Details are as follows: Date: 10 April 2021 to 15 April 2021 No. of participants = 140

The other programmes include, Seminar on Big Bang, ALL ABODE (Mars settlement Hackathon), Seminar on BLACK HOLE, Night Sky Observation





Round Table: A Skill Development Society of DTU organized a number of events during the period. Some of the representative events are given below:

Cognizance: This was held on 9th August 2020 through Google Meet. The webinar discussed the nuances of business and the corporate sector. This event was hosted by Mr. Priyank Ahuja, product manager at Accenture, and Mr. Hemant Ahuja, product manager at PWC. The two hosts shared their knowledge and insights on the corporate sector and answered any queries that the audience posed with great detail and enthusiasm.

Memers among us: This was held on 30th October 2020 to 6th November 2020. This was a meme making competition with the theme of the video game Among Us. The contestants submitted their entries through

Instagram.

AMONG US Tournament: This was held on 3rd November 2020. In the tournament, contestants played against each other in the video game Among Us.

NINJA WAVE: This was held on 5th December 2020. Round Table, in association with IOSD, organised a competitive coding competition. The competition was sponsored by Coding Ninjas with a hefty prize pool.

GUESSTIMATE: This was held on 20th December 2020. In the event, contestants had to solve a set of guesstimates as fast as possible to win.

FRESHMAN INDUCTION: This was held on 9th January 2021. This was organised in collaboration with Coding Ninjas. The webinar went over many aspects of a career in software development as well as introduced students to some important topics of Computer Engineering. The event was hosted by Mr. Parikh Jain, a founding member of Coding Ninjas.

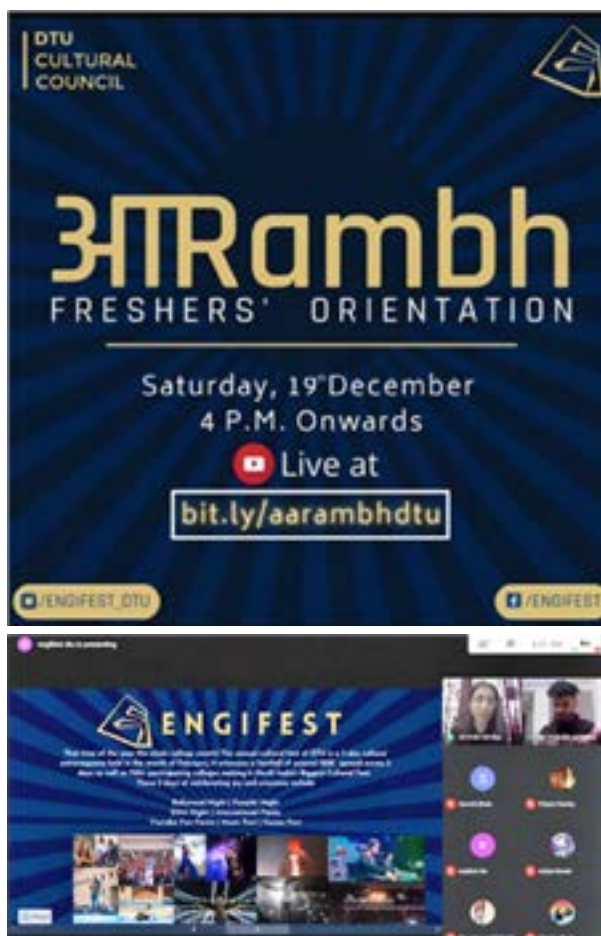
12.3.2 Cultural Societies

The cultural societies increase the level of confidence among the students and also teaches them how to co-operate and work with people in different conditions. They learn to face the challenges that come in education and career. The following cultural societies are available in the campus.

PRATIBIMB	VIBE (DANCE SOCIETY)
PANACHE	BHANGRA
PARCHHAYI	NRITYANGANA
MADHURIMA (MUSICAL SOCIETY)	KALAKRITI
FILM CLUB	

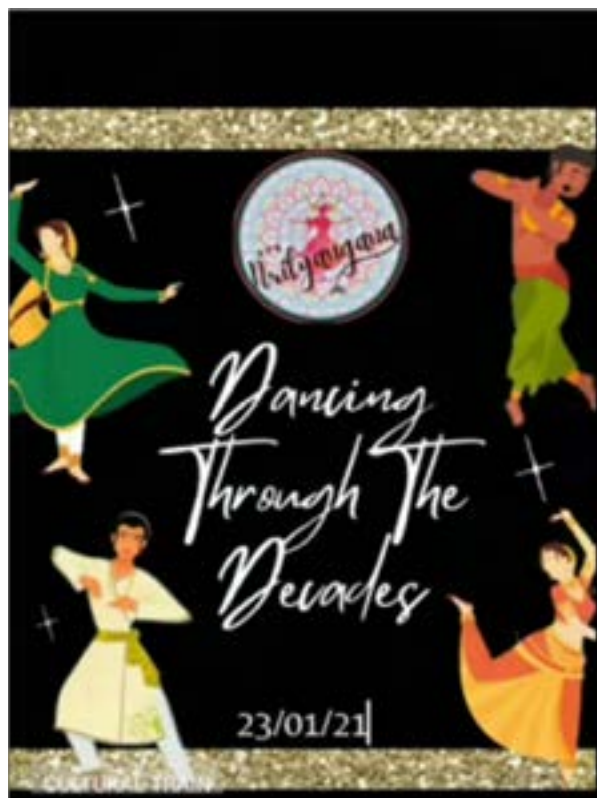
The Cultural Council of DTU takes pride in organising various cultural events in DTU throughout the year including Freshers, Farewell and Engifest.

Aarambh - Freshers' Orientation: "Aarambh" was a one-day orientation organised by the Cultural Council on 19th of December. We instituted orientation for incoming students of DTU to ease the transition into our university. It was a way for students to meet other students, become familiar with campus services and get to know about Cultural Societies through individual presentations.



Freshers' Fiesta: Freshers' Week 2020 was a 2-day extravaganza organized by the Cultural Council on 23rd and 24th January 2021. It was a perfect start for the journey of the new batch of students as it consisted of

a plethora of events and activities for them. One of the main purposes of conducting this event was to welcome new students into the University's atmosphere and to encourage their participation in cultural activities.



Mr. and Ms. Fresher - The flagship event of the Freshers' Fiesta was conducted under the supervision of 3 esteemed judges and 5 winners were announced at the end, namely -

- Mr. Fresher
- Ms. Fresher
- Mr. Popular
- Ms. Popular
- Mr. Talented

COD Gaming Tournament: COD Gaming was a 9-day tournament organised by the Cultural Council from 10th of April to 18th of April, 2021. A total of 50 teams participated in this tournament from various colleges across India, competing for prizes worth INR 50,000.



Farewell'21 - The Farewell Week for the graduating class of 2021 was organized from 19th to 23rd April 2021, however due to the second wave of the COVID pandemic, it was called off and conducted in a virtual manner in the month of May. The event was held entirely online on the DTU Cultural Council's official Instagram page. Even during the unprecedented times, the entire university came together in online mode to

bid a fitting adieu to the outgoing class in these trying times.



12.3.3 Innovation Teams and Projects

To strengthen the student innovative projects and to facilitate more teams of students venturing for innovative projects, financial assistance is provided. The assistance is provided from Rs 50,000/- to Rs 5,00,000/- from the total grant from DTU limited to Rs 8,00,000/- only. The list of teams is given:

TEAM INFERNO	HERTZ ELECTRIC
UNDER GROUND VEHICLE	TEAM RAFTAAR
UNMANNED AERIAL SYSTEM	TEAM SUPER MILEAGE
CASRAE	AUV
ALTAIR	DELTECH BAJA
OKAMI RACING	DEFIANZ RACING TEAM

12.3.4 Literary Societies

To strengthen the student literature capabilities and to facilitate more teams of students venturing for literary activities financial assistance is provided. The following literary societies are active in the DTU campus.

SAHITYA	DTU TIMES
COGNITIVE MINDS	CUBIX-DTU
TOAST MASTERS	YES+HAPPINESS
DELTECH MUN	GYI
QUIZ CLUB	E-CELL
ASES	YUVAAN
TEDxDTU	

On 12th October 2020, program with Ashwin Advani organized. It was very inspiring for the viewers to hear insights from Ashwin Advanis' journey to becoming a true musician. Born and raised in Indore, Ashwin found his love for music at a very young age.

Pehli Mulaqat held on 22nd January 2021. First words, first glances, and our first meetings, the primary moments in our

life are derived by celebrating the firsts. Through Pehli Mulaqat, we allowed freshers of the 2021 batch to catch their favourite Poets, Story Tellers, Musicians, Actors and Authors, with Sukhbir, Aabir Vyas, Vanika Sangtani, Vivek Singh and Taaruk Raina.

The Path Ahead, Career Guidance Workshop was held on 3rd March 2021. It was a very insightful webinar by motivational speakers and career guidance experts. The feedback from the event was very overwhelming as it had cleared a lot of doubts that lie around these 3 important entrance exams for Higher Education. They had even discussed the different colleges abroad that students should look at for further study.

Yuvaan DTU conducted a musical event by Anuv Jain. In this virtual show many soulful songs like Alag Aasman, Mishri, Riha and Baarishein were sung by the extremely talented singer. The magic of his music rejuvenated everyone especially during the hard times.



12.3.5 Financial-Assistant for Innovative work:

The University provides travel grant to students for participating in events like Hackathon, MUN, important meetings (other than innovative project competitions). The event must have participation from reputed academic institution. The University provides 50% air fare, visa and registration fees subject maximum of Rs 75,000/- per student for International event and Rs 25000/- for national event. Maximum number of students attending an event is two only. This facility is given only for once during the period of course of the participant.

12.3.6 DTU Mitra

The DTU Mitr Helpdesk is an information dissemination centre functioning under the office of DSW where students can submit his/her queries. The helpdesk forwards the queries raised by the students to the respective branch.



12.3.7 Association with YourDost

Founded in 2014, YourDOST is an award-winning online counselling and emotional support platform designed to foster mental wellness. It anonymously connects users with the right expert from a pool of psychologists, psychotherapists, counsellors, life coaches and career coaches who understand and guide the users through completely confidential individual sessions. This organization is equipped with the technology to immediately connect the users to one of the 900+ certified experts available on the platform. Through a completely anonymous method of interaction, the user's personal identity is protected.

DTU has signed MOU with this organization to take care of the mental and emotional wellbeing of the DTU staff and students. During last year, this platform has given 1354 counselling sessions of about 29 minutes of average duration each to the students as per their requirements.



12.4 NSS-DTU

INTRODUCTION TO NSS DTU

NSS DTU is the largest student-led organization in the university working in the social sector and aims to bring about a change in society by organizing various events and campaigns pertaining to all aspects of social service. The volunteers commit themselves to the greater good and strive to achieve the best versions of themselves. Awareness regarding the surroundings, identifying social evils pertaining to a region, and formulating and implementing practical ways to tackle them constitutes the role of an NSS Volunteer. Both long and short-term programs in the field of education, healthcare, road safety, etc. ensure efficient functioning of NSS as a unit, encouraging teamwork and helping its volunteers grow immensely on a personal level as well.



EVENTS AND PROJECTS

FIT INDIA Freedom Run 2.0 2021

NSS DTU successfully organized 'Fit India Freedom Run 2.0', an initiative led by the Ministry of Youth Affairs and Sports, as a part of its nationwide celebration of India@75: Azadi ka Amrity Mahotsav. The Guest of Honor for the event was Anamika Chauhan, who graced the occasion with her presence and enlightened the zeal of nationhood among the participants.



Despite heavy rains, the success of the event lies on the shoulders of 90 enthusiastic participants along with 20 volunteers. At first, T-shirts were distributed by the Society Council members. The run was then started, the initial and endpoint being the admin block, covering a total length of 2 km. Certificates were awarded to all the participants and volunteers.

The optimism, dedication, and wholehearted efforts of the team brought the event towards its desired end. The event stood on the pillar of belief and trust that we can invest in the young minds of the nation. The event emerged as a great success due to undaunted and responsible management by the team. It was able to impart the message of the importance of fitness in our day-to-day lives by commemorating 75 incredible years of Indian independence. The satisfaction and joy on the face of volunteers and participants fulfilled the motive behind the event.

Footsteps of Rejuvenation 2021

FOOTSTEPS OF REJUVENATION
COLLABORATING WITH CONVERCARE

JULY 10 2021, 6:00-7:00PM
Video Meeting link: <https://meet.google.com/ane-rljc-nwc>

Topics to discuss:
How to deal with failures
Practice of Positivity
Depression and Anxiety

Speaker: JAPNEET KAUR MAIKAR
(ICI licensed Clinical Psychologist, Masters in Clinical Psychology and an M. Phil in Clinical Psychology)

NSS DTU, in collaboration with ConverCare, organized an interactive webinar, Rise: Footsteps to Rejuvenation, on emotional management. The webinar was organized on 10 July 2021.

The speaker for the session was Japneet Kaur Makkar, an RCI licensed clinical psychologist who has worked in different rehabilitation centers, de-addiction centers, and schools in the government and private sectors. The session aimed to cover the emotional management issues faced by young students, like dealing with failures, practicing positivity, and mental health issues like depression and anxiety.

Umeed- Ek Kiran 2021

NSS DTU, in collaboration with NSS VNC, organized, a week-long social series to shed light on drug addiction, its consequences and rehabilitation from 26th June 2021 to 4th July 2021.

The newfound freedom of adulthood opens many doors to a person, be it success, happiness, fulfillment, or doom. The ease of access to drugs, peer pressure, and a lack of knowledge about drugs lead many naive and ignorant people to places that are hard to come out from. The physical and psychological aspects of drug addiction, social stigma, and lack of accessibility to affordable rehabilitation make it almost impossible to seek help.



" a : " aimed to cater towards such issues. Multiple events took place in the span of these eight days, including movie screenings, interactive sessions, group discussions, myth-busting sessions, QnA sessions, storytelling competitions, etc. The events aimed to make people realize the personal, familial and social damage caused by drugs and how to stay away from such negative influences to lead towards a better drug-free future.

Pride Campaign 2021

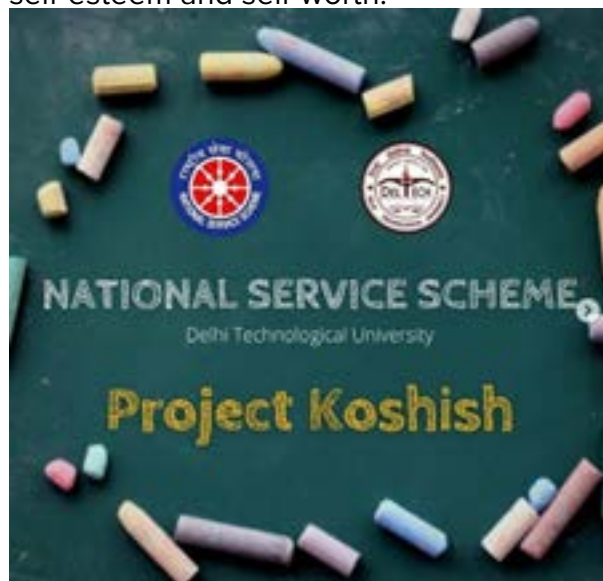
An online pride campaign was organized on NSS DTU's social media handles like Facebook and Instagram which aimed at breaking the taboos, swaying society about the LGBTQIA+ community. The campaign was organized in the month of June, which is popularly celebrated as pride month around the world to acknowledge the struggles, contribution, honor, and success of the community. The campaign was led with the sole motive of spreading awareness among people about various undiscussed topics like gender-neutral pronouns, barriers in LBTQIA+ community's empowerment, being an ally, and milestones achieved so far in order to foster an inclusive and acceptable society for them.



Koshish 2021

NSS DTU initiated the project "Koshish" in June 2021. Koshish is an initiative in collaboration with "Koshish-Umrao Singh Educational Society", aiming to benefit underprivileged children by enlightening their minds with good quality education. This is an effort to transform their lives by giving them an opportunity to enhance their knowledge and to make them competent for future challenges.

For the first time, we have taken steps to make difference in the lives of children with autism, mental deceleration, cerebral palsy, multiple handicaps, hearing impairment, and other neurological conditions through our educational services. We wish to empower their families by igniting a sense of creativity in them. While teaching, we focus on the holistic development of students and help them in taking informed steps on the path of their learning. We strive to nurture their interests by taking classes for art and craft, giving real-life examples, figuring out their interests, customizing the curriculum, and appreciating their smallest achievement. We focus on their social development and explore their hidden talents to value their self-esteem and self-worth.



To date, our diligent volunteers have successfully taken more than 70 classes by teaching for more than 120 hours. We, at NSS DTU, vow to lead an optimistic impact on several lives through such initiatives.

Benefits of Plant-Based diet 2021

NSS DTU in collaboration with the Federation of Indian Animal Protection Organisations organized a webinar on "Benefits of Plant-Based diet" on 20 June 2021. Preen Sachdeva, a PhD Scholar in Development Studies at TISS, graced the event with her presence as the guest speaker. The webinar began with a discussion on the adverse effects of meat and its byproduct-based industries on climate, and how this has resulted in the sudden rise in air pollution. After this, some infectious diseases contracted from animals like Swine Flu, Ebola, Covid 19, etc., were discussed. Some common myths, like meat-based products, are the only sources of protein, were addressed and busted. Viewers got to know about different alternatives to all meat-based products. Viewers were educated about many plant-based foods that are richer in protein and are healthy. The discussion concluded with an emphasis on the



Benefits of Plant-based diet

benefits of a plant-based diet for both climate control and personal growth. The webinar ended with an E-potluck session where everyone had a plant-based meal. The session witnessed interactive and light-hearted talks, motivating participation from the audience. Everyone gained some insightful knowledge about how one's diet affects the environment. The session urged the audience to lead a healthy lifestyle.

Session on Blood Donation Awareness 2021

NSSDTU in collaboration with BloodConnect conducted a session on Blood Donation Awareness, on the occasion of World Blood Donors Day, which is celebrated every year on 14th June. The guest speaker for the session was Manisha Singh. Currently working in TCS as a developer, she joined BloodConnect in 2017 and had been one of the first members of the organization when it was set up in Ranchi. The aim of the session was to make people understand the need for blood donation, its acute shortage in India, busting myths related to blood donation.

Webinar on Foreign Universities Admission 2021

NSS DTU in collaboration with Yocket conducted a webinar to specifically cover issues related to profile building for applying to foreign universities. The Guest Speaker for the sessions was Biruda Virkud, a Global Admissions Specialist who has assisted 10,000+ students with admissions and scholarships into 1,000+ universities across the USA, Canada, Europe, UK, Australia, New Zealand, and Singapore in the past 20 years. The webinar gave important insights about profile building for top universities abroad and all the other aspects for admission abroad.



Sex Education story series 2021

The Editorial department of NSS DTU organized a story series on Sex Education to dispel the stigma related to sexual health and puberty-related conversations, discussions, and issues. Often, in our society, this issue is not given adequate attention and is considered as a matter of disgrace and dishonor. This invited an urgent need to bring it to the discussion table, and address it. We curated a Facts V/S Myths series to classify common beliefs regarding sexual health and puberty as



facts or myths, "Felt but unsaid" series to highlight various unsaid feelings and get the audience's opinion on them initiative was supported by webinars and panel discussions on this issue which led to a positive impact.

Kartavya' 21

NSS DTU is delighted to celebrate the success of its second social E-fest Kartavya' 21 themed around "Breaking the Stigma". The event was an amalgamation of insightful and empowering sessions that spoke volumes about the world that wraps us. This 5-day extravaganza was organized from 9 April 2021 to 13 April 2021 in association with Skilling You, Yocket-Study Abroad, and Pratisandhi.

Attracting a huge audience and participants in a plethora of webinars and competitions, Kartavya' 21 aimed to build a platform where people can freely voice their opinions which are often left unexpressed and suppressed by the taboos swaying our society. The events organized as a part



of this fest enlightened the youth about various social, medical, and personal issues which we battle every day in our lives. Attacking the preconceived, conservative, and narrow-minded notions which often govern our conversations and interactions, this fest uncaged the ideas and thoughts of people by giving them wings to soar high in the sky and lead the change they want to see in this world. The sole motto of this fest was to create awareness among the masses so that they can perceive this world with an open-minded pursuit and embrace the reality which is often forced under the carpet of negligence, ignorance, embarrassment, and disgrace.

From bringing the struggles of the LGBTQ+ community to the discussion table to inciting the conversations about sex education, from unraveling the mysteries about life-threatening cancer to stressing the importance of women health and hygiene, from addressing the importance of mental health to destigmatizing the taboos prevalent around us, Kartavya' 21 paved the way to explore this world with an unprejudiced and non-judgemental perspective. Upholding the ideals of optimistic change and selfless service, NSS DTU is committed to humanity.

Women's Day Campaign 2021

This International Women's Day, we at NSS DTU organized an online campaign to acknowledge and celebrate the success and struggles of women in this patriarchal world.

We have come a long way. Women's rights are foundational for any progressive society. These rights are fundamental and advocate equal opportunities for both men and women in all walks of life. The Women's rights movement has come a long way since the Women's Suffrage (Right to Vote) and



legal rights in the 20th century. It has faced various kinds of challenges, criticisms and has undergone various reforms. The notion of modern Feminism is not just about the upliftment of women. Instead, it is the belief in the political, economic, and social equality of the sexes expressed especially through organized activity on behalf of women's rights and interests.

Some of the rights include the Right to education, adequate healthcare, and equal pay at workplaces. These rights empower women to speak up against any kind of discrimination, domestic abuse, sexual violence, and injustice. According to the UN, gender equality and the empowerment of women and girls is not just a goal in itself but a key to sustainable development, economic growth, and peace and security.

Road Safety Awareness 2021

NSS DTU organized a Road Safety workshop on 7th February 2021 to spread awareness about various traffic rules and road safety practices. Mr. Jatin Kataria, the chief instructor at Honda Motors, joined the workshop as our lead instructor.

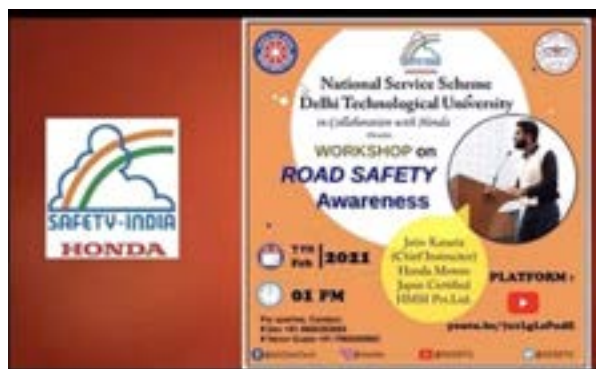
The workshop covered a detailed explanation of different riding gears, safety equipment, traffic lights, and road markings, alongside covering regulatory, warnings, and guide signs. It was followed by the declaration of the Road Safety Poster Making Competition results, which saw over 500 entries from 30 schools. The

event concluded with a vote of thanks by Anamika Chauhan, faculty coordinator of NSS DTU. The workshop proved to be a great learning experience as the audience learned techniques to prevent major accidents on roads and become a safe driver.

Blood-The Gift of Life 2021 NSS

DTU organized an interactive online session, “Blood- The Gift of Life” with Dr. Abhishek Garg, MBBS, founder of “Organum Donum” and Post-Graduate Scholar at Lady Hardinge Medical College on 30th January 2021. The session also saw the inauguration of Rakt website- an online platform to connect blood donors with needy patients.

The event began with the inauguration of Rakt portal and a little talk about its work and uses.



Then Dr. Abhishek Garg busted some common myths about blood donation in an interactive manner. He also shared his personal blood donation experiences and what inspired him to donate blood. The event concluded with a discussion with raktveers. They told everyone about their

experience of donating blood the first time and various precautions to be taken while donating the blood during the COVID-19 pandemic.

First Aid for Animals 2021

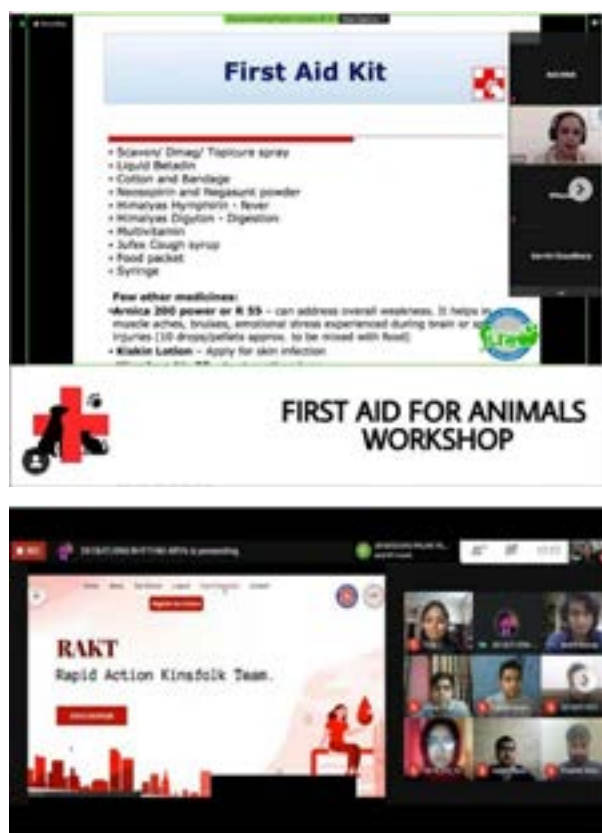
Voice Of Animals, an initiative by NSS DTU in collaboration with Straw India, organized an online workshop on “First Aid For Animals” on 10th January 2021. The session focussed on first aid for various animals ranging from dogs and cats to snakes.

The instructors discussed necessary vaccinations and some at home and over the counter treatments for various issues that the strays encounter like ticks, maggot

wounds, fleas, and burns. The workshop also discussed various symptoms, precautions, and treatments for different body part infections in dogs and situations where vet interventions are necessary. The session ended with a Q&A round where the instructors answered the participants’ queries and gave a list of medicines and ointments to keep in our first aid kit for animals.

Kalam Ko Salam 2021

Kalam ko Salaam, an initiative by NSS DTU, aims to combine the conventional modes of teaching along with extracurricular activities. Weekly visits are conducted to the 'Shubhakshika' Open Shelter. Our volunteers currently teach students from class 3rd, 5th and 8th.



13 Central Facilities

13.1 Library

1. Name of Integrated Library Management System (ILMS): KOHA
2. Collection of rare books, manuscripts, special reports or any other knowledge resource for library enrichment

S. No	YEAR	AUTHOR	TITLE
1	1859	Zherebtson	Fundamentals of Radio
2	1900	R. Bruce, Lindsay	Physical acoustics
3	1913	J. GROSSMANN M.A.	THE ELEMENTS OF CHEMICAL ENGINEERING
4	1914	J.E. Myers & others	Elements of Practical Chemistry
5	1917	Herbert F. Moore	Textbook of the materials of engineering
6	1917	Moore & Moore	Textbook of the materials of engineering
7	1917	Herbert F. , Moore	Textbook of the materials of engineering
8	1920	North	Chemistry for Textie Students
9	1920	J. Duncan	Applied mechanics for engineers
10	1920	Harry Jackson Burt	Steel Construction
11	1920	Ewats Andrews	An introduction applied mechanics
12	1920	Ewats. Andrews	An introduction to applied mechanics
13	1920	J. Duncan	Applied mechanics for engineers
14	1920	Harry Jackson Burt	Steel Construction
15	1920	Ewats Andrews	An int examples in applied mechanics
16	1920	W. E. Dur	worked examples in applied mechanics
17	1920	Ewats. Andrews	An introduction to applied mechanics
18	1920	North	Chemistry for Textie Students
19	1922	Fredric W. Keator	Mechanical laboratory methods
20	1922	Fredric W. Keator	Mechanical laboratory methods
21	1923	A. F. Clayton	Alternating currents
22	1923	A. F. Clayton	Alternating currents
23	1924	Bailey	Course of experimental mechanics
24	1924	Bailey	Course of experimental mechanics
25	1925	L. F. Woodroff	principles of electronic power transmission
26	1925	Sir H. Frank	Industrial research & development
27	1926	C.G. Vermon	An Introduction to Chemistry
28	1926	C.G. Vermon	An Introduction to Chemistry
29	1928	RCA Victor	Rca Victor Service Notes
30	1928	H. L. Childe	Concrete products & cast stone

S. No	YEAR	AUTHOR	TITLE
31	1928	S. Timoshenko	Vibrations problems in engineering
32	1928	H. L. Childe	Concrete products & cast stone
33	1928	Baueree	Plain concrete
34	1928	E. E. Bauer	Plain concrete
35	1928	J. Newton Friend	Inorganic Chemistry (Vol.11)
36	1928	J.N. Friend	Inorganic Chemistry Vol.3
37	1928	J.N. Friend	Textbook of Inorganic Chemistry (vol.11)
38	1928	J.N. Friend	A Textbook of (Vol.9) Inorganic Chemistry
39	1929	GIBSON C.R.	ABOUT COAL AND OIL
40	1929	P.J. Lancelot Smith	Science Today
41	1929	P.J. Lancelot Smith	Science Today
42	1929	Rimbaoh R.	Beryllium and its alloys
43	1930	W. Abbott	machine drawing and design
44	1930	W. Abbott	Machine drawing and design
45	1931	R.H. Vallence & Others	T B of Inorganic Chemistry (vol.07) Part 2
46	1933	KEMPSTER B ,MILLER	TELEPHONE THEORY AND PRACTICE
47	1933	Reigeluth	Safety & economy in heavy construction
48	1933	Reigeluth	Safety & economy in heavy construction
49	1934	Eliot F. Tozer	Machine drawing
50	1934	Eliot F. Tozer	Machine drawing
51	1934	J.L. Gregg & Others	Arsenical and Argentiferous copper
52	1935	L. V. Gurjar	Elementary mechanics
53	1935	F. M. Lea	Chemistry of cement & concrete
54	1935	P. Timoshenko	elements of strength of materials
55	1935	T Dyson	Principles of machnics
56	1935	L. V. Gurjar	Elementary mechanics
57	1935	F. M. Lea	Chemistry of cement & concrete
58	1936	C. F. Caunter	small four- stroke aero engines
59	1936	A. C. Parkinson	Intermediate engineering drawing
60	1936	A. C. Parkinson	Intermediate engineering drawing
61	1936	Marston	Engineering valuation & depreciation
62	1936	C. F. Caunter	Small four- Stroke aero engines
63	1936	A King	Inorganic Chemistry Preparations
64	1937	Rider J.E	Automatic Frequency Control Systems
65	1937	Alfred T. Witts. A.M.I.E.E	Superheterod Yne Receiver
66	1937	Brown & Bryart	Engineeirng science
67	1937	Bryant & Bown	Engineering science

S. No	YEAR	AUTHOR	TITLE
68	1937	Brown & Bryart	Engineerig science
69	1937	A.E. Goddard	Textbook of Inorganic Chemistry Vol.XI Part IV
70	1937	J. Newton Friend	Textbook of Inorganic Chemistry Vol.VI Part 2
71	1938	GROGGINS,P.H.	UNIT PROCESSES IN ORGANIC SYNTHESIS
72	1938	R.E Blakey D,Sc.	The Radio and Telecommunication Engineers Design Manual
73	1938	Philip Gustave Laurson	Mechanics of material
74	1938	F. E. Wentworth	Reinforced concrete piling
75	1938	Philip Gustave Laurson	Mechanics of material
76	1938	C. Truesdell	The elements of materials
77	1938	F. E. Wentworth	Reinforced concrete piling
78	1939	HEMPEL (E.H.)	ECONOMICS OF CHEMICAL INDUSTRIES
79	1939	Paul Arthur	Lecture Demonstrations in General Chemistry
80	1939	HAROLOD SIMMONS BOOTH	INORGANIC SYNTHESIS VOL-I
81	1939	A.M. LOW	SCIENCE IN INDUSTRY
82	1939	SCHNFELD H.	Chemic Und Technology Der Fette Und Fett Productive
83	1939	Boltz C.I.	Wireless
84	1939	J.E. Taylor	Engineering design
85	1939	D. Laugharne	Mechanics applied to vibrations & balancing
86	1939	Clarence W. Dunham	The theory & pactice of reinforced concreete
87	1939	J.E. Taylor	Engineering design
88	1939	D. Laugharne	Mechanics applied to vibrations & balancing
89	1939	Clarence W. Dunham	The theory & practice of reinforced concrete
90	1939	Paul Arthur	Lecture Demonstrations in General Chemistry
91	1939	A. Spencer Whhite	Chemistry Gate
92	1940	Watson H.M	Understanding Radio
93	1940	R.V. Soutgwell	Relaxation methords in engineering science
94	1940	Tuflin	Vibration in machinery
95	1940	Thomas E. French	Mechanical drawing
96	1940	PUL	Popular mechanics what-to-make
97	1940	Henry C. Sharman	Esential of nutritions
98	1940	R.V. Soutgwell	Relaxation methords in engineering science
99	1940	Tuflin	Vibration in machinery
100	1940	Thomas E. French	Mechanical derawing
101	1940		Popular mechanics what-to- make
102	1941	Rhodes (R.T.F.)	Forensic Chemistry

S. No	YEAR	AUTHOR	TITLE
103	1941	WARD C.A.	THOSE RAW MATERIAL
104	1941	BADGER & BAKER	INORGANIC CHEMICAL TECHNOLOGY
105	1941	Fckersley P.P	Power Behind The Microphone
106	1941	RUSSELL & BEACH	TEXTBOOK OF SALESMAN SHIP
107	1941	proton	Cables and wires
108	1941	Goodman	Mechanics applied to engineering
109	1941	Low & Bavis	Manual of machine drawing & design
110	1941	H. H. Winstnly	Junior technical drawings
111	1941	Goodman	Mechanics applied to engineering
112	1941	Low & Bavis	Manual of machine drawing & design
113	1941	Rhodes (R.T.F.)	Forensic Chemistry
114	1941	Jack De Ment & Others	Uranium and Atomic Power
115	1941	Farrington Daniels & Others	Experimental Physical Chemistry
116	1941	Wachtel	Chemical Warfare
117	1942	Vierte Auflage	Brilsteins Handbuch Der Organichen Chemie
118	1942	Ladner (AW)	Short wave wireless communication
119	1942	FIERCE, (D.E)	Chemical Eng. For Production Supervision
120	1942	ROBINSON,(C.S)	RECOVERY OF VAPORS
121	1942	ROGER	INDUSTRIAL CHEMISTRY
122	1942	Bevis Brunel Low	Theory of machines
123	1942	Clarence E. Bullinger	Engineering economic analysis
124	1942	C. W. Bank	applied science
125	1942	Bevis Brunel Low	Theory of machines
126	1942	Vierte Auflage	Brilsteins Handbuch Der Organichen Chemie
127	1942	Lowry, C.B.E & Others	Intermediate Chemistry
128	1942	R.M. Caven	Systematic Inorganic Chemistry
129	1943	Howard W. Post	The Chemistry of the Aliphatic Orthoesters
130	1943	L. Gattermann	Laboratory Methods of Organic Chemistry
131	1943	Olaf A. Hougen	Chemical Process Principle
132	1943	Joseph Reilly	Physico-Chemical Methods
133	1943	Turney	Intro To Electricity and Radio
134	1943	Nelson M.Cooke	Mathematics Essential to electricity and Radio
135	1943	Biswas,N.N	Principles Of Telephony
136	1943	ZIMMERMAN,(O.T.)	CHEMICAL ENG. LABORATORY EQUIPMENT
137	1943	O.T. ZIMMERMAN	Chemical Engineering Laboratory Equipment
138	1943	C. R. Freberg	Elements of mechanical vibration
139	1943	Morley	Applied mechanics

S. No	YEAR	AUTHOR	TITLE
140	1943	Luzadder	Fundamentals of engineering drawing
141	1943	H. K. Sen	Class note on surveying
142	1943	James F. Young	Materials and processes
143	1943	C. R. Freberg	Elements of mechanical vibration
144	1943	Morley	Applied mechanics
145	1943	Luzadder	Fundamentals of engineering drawing
146	1943	H. K. Sen	Class note on surveying
147	1943	James F. Young	Materials and processes
148	1943	Howard W. Post	The Chemistry of the Aliphatic Orthoesters
149	1943	L. Gattermann	Laboratory Methods of Organic Chemistry

3. Does the Institute have the following:

- | | |
|--------------------------|-----|
| a. E-journals | Yes |
| b. E-ShodhSindhu | Yes |
| c. Shodhganga membership | Yes |
| d. E-Books | Yes |
| e. Databases | Yes |

Details of memberships/ Subscription	No of resources with full text access	Validity period	Usages report from the service provide. If applicable	Whether remote access provided? (Yes/ Not)	Web link of remote access
DELNET	40039	31.12.2021	Below mentioned under Electronic database	Yes	https://dtulibrary.remotexs.in/user/login

Electronic Databases:

S. No	E - Resources	No of Jrs	Usages (Full text downloads)
1	ACM	13	2107
2	American Chemical Society	49	3737
3	American Institute of Physics	19	1155
4	American Physical Society	15	455
5	ASCE	36	1420
6	ASME	29	344
7	ASTM	9	632
8	EBSCO Ultimate	7016	3977
9	Emerald	310	10109

S. No	E - Resources	No of Jrs	Usages (Full text downloads)
10	ICE	40	159
11	IEEE/IEL	373	21868
12	IndianJrs.com	115	1016
13	Institute of Physics	85	2606
14	IWA Publishing Journals	12	2376
15	J-Gate	27928	2816
16	Nature	1	3260
17	Oxford University Press	262	550
18	Sage	121	579
19	Science Direct	804	73531
20	Springer Link	1724	23640
21	Taylor & Francis Journal	1078	4503
	Total =	40039	

E-Books:

S. No	Publisher	Numbers
1	Elgar (Management)	21
2	CBS (Envt)	20
3	Elsevier (Biotech, Chem, Civil, CSE, Electrical, IT, Emt, Mechanical & Physics) 10 depts	330
4	Pearson (Mech & Management)	391
5	T&F (Elec, Emt & IT)	89
6	Videeya (General)	338
7	KopyKitab (General)	20
8	Wiley (Mix)	71
	Total =	1280

4. Details of annual expenditure for purchase of books and journals during the last five years (INR in Lakhs)

Year of expenditure	Expenditure on the purchase of journals in (INR in lakhs)	Expenditure on the purchase of books in (INR in lakhs)	Expenditure on subscription to e-journals and other e-resources (INR in lakhs)
2020-2021	6,00,84,836.00	39,90,632.00	44,06,910.00 e-book
2019-2020	2,18,597.00	57,61,881.00	1,19,25,144.00
2018-2019	2,22,143.00	58,16,766.00	2,48,24,843.00
2017-2018	2,50,916.00	16,37,587.00	2,18,25,951.00
2016-2017	1,48,758.00	24,50,553.00	1,81,19,570.00

Central Library Staff



Librarian
Dr. Rama
Kant Shukla

Assistant Librarian

Dr. (Mrs.) Lalita

Counter Assistant Mrs. Neeru Malik
Mrs. Taruna Mrs. Neeru Vig
Mrs. Rampati Nain Mr. Abdul Aleem

Library Attendant **Lab Attendant**
Mr. Saudan Singh Mr. Narender Sharma

Central Library



Library Magazines and Newspaper Section



Library Text Book section



Library Book Bank



Library Text Book section



Library Reading Room



Library entrance



13.2 University Computer Centre

Head of the Computer Center

Smt. Divya Narayan, head.cc@dce.ac.in

Knowledge Network Manager

Sh. Piyush Vaish, piyushvaish@dtu.ac.in

Other Technical Staff

Sh. Manish Kumar	Assistant Programmer
Sh. Mukesh Kumar	Assistant Programmer
Sh. Sudhir Kumar	Network Assistant
Sh. Vinod Saini	Network Assistant
Sh. Vikas Sinha	Junior Technical Assistant

DTU has a well-equipped centralized computer centre to cater to the needs of high profile students and faculty in the University. It is housed, in a magnificent state-of-the-art building having specialized laboratories to provide variety of platforms and computing environment for UG, PG and Research students. The centre possesses HP ML370 standalone servers & DL360, Dell R630 & R720 rack servers, Dell blade servers (power edge 1000e) and about 290 desktop computer of latest configuration (Intel Core i5 processor). These are working on Windows 10 professional edition, server 2012, 2016 and Linux platforms. Additionally, it provides Microsoft product license for registered Windows and MS Office to DTU faculty.

DTU Campus-wide Network

The centre is networked through high-end intelligent Dax/Avaya/D-Link/Brocade/Juniper manageable switch, and possesses round the clock two leased lines of 10Gbps link of NKN (primary line) and 1Gbps link of Reliance Jio (secondary line) in different pipes for the Wi-Fi connectivity in the Library, Academic, Departments, Administrative, Faculty residence and Hostel blocks of the campus, with internet facilities on all the nodes. Access for internet is given to end user after secure authentication. Network traffic is being monitored & controlled by



full version of Palo-Alto5220 (Firewall & UTM). Presently all the 290 computers are connected through LAN in two floors of computer centre providing internet access. It is providing programming facilities to all the departments of the university. The departments/academic/library/administrative blocks, faculty residence and all the hostels of DTU are interconnected using 48 core & 6 core optical fiber cable(OFC) and Wi-Fi with 250 number of access points. The present network setup satisfies the needs of the University's rudimentary Internet connectivity and maximum resource sharing for the connected departments. To put DTU on par with IITs and reputed NITs, it is necessary to use Information Technology as the backbone for its academic, research, consultancy and administrative ventures

DTU Website

Computer Centre maintain DTU websites (www.dtu.ac.in), alumni portal, training & placement department, academic departments portal, library portal, IQAC portal, faculty portal, hostel portal, student portal and other related intranet/internet web services. The DTU website is updated by this centre on daily basis. The information on the website displayed after the approval of the concerned department, faculty or administrative offices. Computer Centre provides mail services to the university teaching communities and administrative officers. Mail service is integrated with Google G-Suite education edition to all its faculty and students for day-to-day academic work.

13.3 Department of Training and Placement

The Department of Training and Placement is the nodal department for coordinating the training and placement efforts of the university. It is responsible to hone the skills of talented DTU students and train them for placements and internships at reputed multinational firms.

The placement process begins by sending invitations to companies to visit the University for Pre-Placement talks and provide their job announcements. The talks provide an avenue for interaction and familiarization of students with the recruiting organizations and their work profile. Students from Bachelor of Technology (B.Tech), Master of Technology (M.Tech), Master of Business Administration (MBA) programs in various fields of engineering and technology, participate in the placement process.

Placements Overview:

Organizations from diverse background participate in the recruitment session every year, offering a wide variety of profiles which can be broadly classified into:

1. Core Engineering & Technology

The students of DTU continue to demonstrate a strong commitment to their core educational background in the choice of employment. A large number of students opt for science, engineering and technology oriented jobs, with the recruiting companies operating in various sectors of the economy. Some of the core companies are Maruti Suzuki, Bajaj, L&T, Hyundai, Samsung Engineering and R&D, Texas Instrument, Qualcomm, Western Digital, BASF, to name a few. There were 413 job offers from 105 organizations in in Core Engineering domain.

2. Software & IT Enabled services

129 leading IT firms, including several global leaders, visited DTU for campus placements during 2020-21. These organizations work with large corporations across the world and help them resolve complex business problems. Management Consulting companies especially carry a reputation of being very selective in their choice of campuses and of having extremely high standards in their recruitment process. 684 offers were made in software firms like, Google, Amazon, Microsoft, Atlassian, Sprinklr, DeShaw, Flipkart, Adobe, Paytm, Goldman Sachs, Citibank, Uber, SAP Labs, Airtel to name a few.

3. Analytics and Consulting

The well-deserved reputation of superior analytical and reasoning skills of DTU graduates continues to draw recruiters from the rapidly growing field of data analytics. There were 445 job offers from 83 organizations in 2020-21 making it one of the biggest sector after information technology profile. Some companies that visit DTU are JPMC, Mckinsey & Co, Optum, Barclays, Deloitte, ZS Associates, EXL Services, Bank of America, KPMG, Bain, BCG, Willis Towers Watson, PWC, Moody's Analytics, Landmark, Thorogood and many more.

4. Teaching

DTU has continued to provide faculty to several educational institutions and universities through campus recruitments over the past several years. Many post-graduate students have been offered jobs with public and private educational institutions

through campus placement. Some of the educational institutes visiting DTU are Byju's, Aakash Institute.

5. PSU/ Government

Various PSUs and Government organisations hire from DTU, the

institutions include PSUs like GAIL, BEL, C-Dot to name a few. Defence forces like Indian Air Force and Indian Navy also visit the campus to hire talented DTU graduates. This year UIDAI also hired multiple students from DTU.

Name of Course	Name Of Department	No of Offers Made	No. Of Student Placed	No. of Internships and Field Training Offers	Highest Package Offered (in LPA)
B. Tech	Automotive Engineering	31	30	1	11.5
	Bio Technology	12	12	2	13.7
	Civil Engineering	48	44	12	30
	Computer Engineering	368	309	139	112
	Electrical Engineering	154	129	22	32.8
	Electronics and Communication Engineering	159	132	33	32
	Engineering Physics	42	39	5	15
	Environment Engineering	28	27	10	15
	Information Technology	121	99	41	51.75
	Mathematics and Computing	106	89	22	43
	Mechanical Engineering	149	131	20	30
	Polymer Science and Chemical Technology	30	30	4	15
	Production and Industrial Engineering	34	30	3	12.57
	Software Engineering	119	101	44	112
	Total	1401	1202	358	
M.Tech	Civil Engineering	21	20	--	7.7
	Electrical Engineering	15	14	3	12
	Mechanical Engineering	16	13	1	9
	Computer Science Engineering	33	29	--	31
	Electronics And Communication Engineering	36	30	--	31
	Applied Physics	1	1	--	17.5

Name of Course	Name Of Department	No of Offers Made	No. Of Student Placed	No. of Internships and Field Training Offers	Highest Package Offered (in LPA)
	Environment Engineering	--	--	--	--
	Applied Chemistry	--	--	--	--
	Bio Technology	5	5	1	6
	Information Technology	19	15	1	22
	Total	146	127	362	
MBA	MBA (All Specializations)	58	55	3	13
B.Tech (CE)	B.Tech (Continuing Education)	50	47	3	14
BBA/BAE		30	29	7	10
M.Sc.		15	14	--	9
	Total	1700	1474	375	

Placement Highlights 2020-21

345+ Recruiters

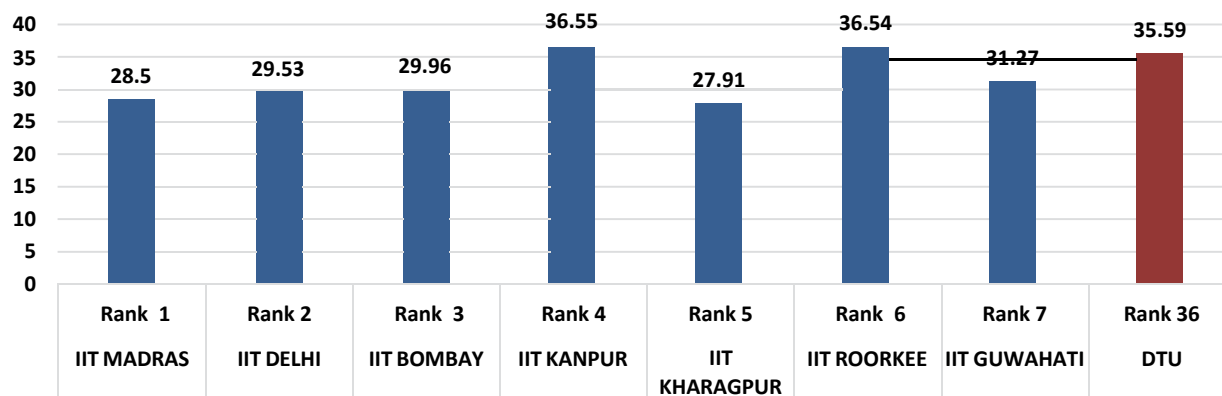
1.12 CR Highest CTC

1700 Total Offers*

12.00 LPA Average CTC

DTU has always been ranked among the top IITs in terms of Placements and Higher Studies. It has been given 2nd highest scores in graduation outcomes by NIRF rankings released by the ministry of HRD.(2020-21)

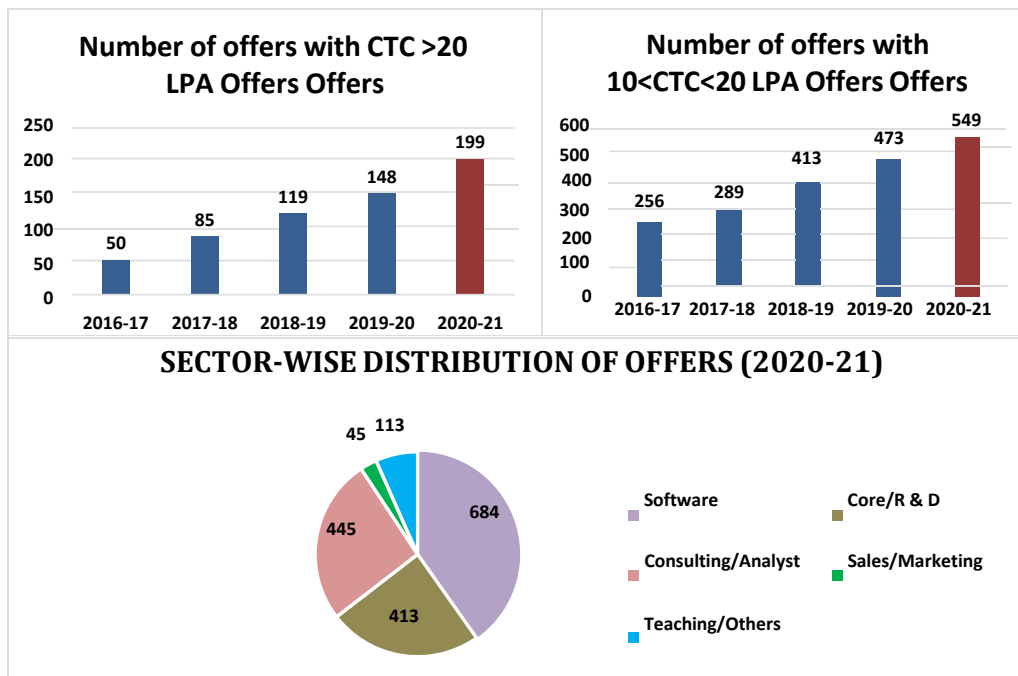
Combined % for Placements, Higher Studies and Entrepreneurship (GPHE) out of 40



Our Top Recruiters



The CTC offered by companies to DTU students has also seen a steady increase in the past 5 years. In the year 2020-21, the number of offers above 20 LPA rose to 199 and those between 10 LPA and 20 LPA rose to 549. The average CTC offered is also 12.00 LPA. This is a proof of the rising demand for talented graduates of DTU.



The demand for DTU students is evident from the fact that companies are not only offering high packages but are hiring in big numbers. Some companies with high packages and high number of offers are listed below:

COMPANY	CTC OFFERED	NUMBER OF OFFERS
	1.12 Cr PA (International)	3
	32.16 (Domestic)	18
	51.75 LPA	6
	43 LPA	14
	33.5 LPA	6
	32 LPA	18
	30 LPA	16
	14 LPA	65

International Offers

Several DTU students are also selected every year for international jobs, in countries like Singapore, USA, Ireland, United Kingdom, Dubai, France and Germany to name a few. These students have time and again made DTU proud by their global achievements. Provided below is a list of top international offers to DTU students in recent years.

Company	Student Name	Package	Year
Amazon	Nandana Tiwari	€ 128,000/Year (₹ 1.12 Crore)	2020-21
	Prashansa Bhattacharyya	€ 128,000/Year (₹ 1.12 Crore)	
	Sakshi Vatsa	€ 128,000/Year (₹ 1.12 Crore)	
	Shivam Maini	€ 125,000/Year (₹ 1.07 Crore)	2019-20
Facebook	Vishakha Banka	£ 100,000/Year (₹ 1.02 Crore)	2018-19

Internship

Apart from the stellar placement record DTU also had a record breaking internship season 2020-21. A number of domestic/international recruiters visited the campus for the purpose of on-boarding interns. Many students were also given Pre-Placement Offers by companies based on their internship performance. The stipends went as high as 2 lakh.

437+ Offers

2 Lacs Highest Stipend

34 Offers Above Rs 1 Lakh

115 1L <stipend<50 thousand

Listed below are some of the companies who offered more than Rs 70000PM in stipend to the students:

Company	Stipend	Company	Stipend
Sprinklr	200000	Microsoft	80000
Uber	160000	Goldman Sachs	80000
Arcesium	100000	Wells Fargo	80000
DE Shaw	100000	Indus Valley	75000
Adobe	100000	MyKaarma	70000
Google	98000	American Express	70000
Morgan Stanley	87000	Atlassian	70000

Training Programmes

Department of Training and Placement provide industry relevant and skill enhancing trainings to make the students competent for the different roles. A comprehensive training program is designed for the overall development of the students in the following broad categories:-

S. No	Category	Programs
1	Career Counselling	<ul style="list-style-type: none"> Mentorship session which enable students to gain knowledge about the various career and higher study options after graduation.
2	Skill enhancement Program	<ul style="list-style-type: none"> Talks/expert lectures on skill enhancement by alumni working in diverse sectors to prepare for requirement of industry. Workshops to enhance communications skills, interview skills and group dynamics.

S. No	Category	Programs
3	Industry relevant training programs	<ul style="list-style-type: none"> Workshops on various domains like electronics, mechanical, robotics, software, analytics and consulting. Training programs organized in collaboration with many prestigious organizations on current trends in Technology.
4	Interview preparatory sessions	<ul style="list-style-type: none"> To acquaint the students with the processes of different companies, mock interview sessions, specifically designed and customized as per the past process of each company are conducted.
5	Sessions for research & Higher studies	<ul style="list-style-type: none"> Sessions focused majorly on higher education are conducted involving experts from Harvard University, Carnegie Mellon University, National University Singapore, Nanyang Technological University and ISB Hyderabad to guide the DTU students about the application process and common doubts. The sessions have been effective in augmenting the career related knowledge of students.

Infrastructure

In order to conduct presentations, online tests, group discussions and interviews the department has following infrastructure:

No of Interview rooms	No of group discussion (GD) rooms	online test facility (No of computers in CC)	Presentation hall
27	5	280	02

13.4 Sports and Gymnasium

Director Physical Education:

Dr. A.K Srivastava

Facilities

The students of Delhi Technological University are provided with excellent facilities and encouraged to take part in the tournaments held in and around NCR Delhi, particularly, engineering institutions. Delhi Technological University is having 400m running track, ground for Football, Hockey, Cricket, two courts for Volley Ball, two courts for Basketball, three courts for Tennis and five courts for Badminton, Three Kabaddi courts, Indoor Games facilities are also provided i.e. Table Tennis rooms, Chess rooms, Carom rooms and Gyms are also available in each hostel of the DTU campus. The university has well equipped gymnasium with the modern equipments. The university students, faculty and staffs utilise this facility. There are two full gymnasiums in the university, one is situated in the sports ground and yet another is situated in the faculty residential area which is generally used by girl's students also.



The Main Cricket Field and Athletics track in the Sports Complex



The Volleyball, Basketball and Tennis Courts at the Sports Complex



Main football field adjacent to director's residence



The DTU Gymnasium

13.5 University Health Centre (UHC)

Rajesh Birok, Officer-In charge

The DTU is having a modest Health Centre manned by well experienced Doctors and other paramedical staff. The services of two general medicine practitioners are available to the students and all other stakeholders throughout the day. The University Health Centre is also visited by specialized medical practitioners for Eye, Dental care, Orthopedic, Gynecology, Psychiatry, Physiotherapy etc. for expert advice and treatment. University is also

having tie up with nearby leading hospital viz., Ishan Hospital for emergency medical assistance for students. A large number of hospitals in the vicinity of the University are also on panel such as Saroj Hospital, Mahavir Hospital, Jaipur Golden Hospital and Max Hospital etc. Moreover, a state of art sports medicine-cum-physiotherapy center has been providing the necessary expert advice. The following Doctors engaged in the University Health Center.

S. No.	Name	Expertise	Days	Timing
1	Dr. Ravi Bansal	General Physician	Mon to Sat (6 days in a week)	1 PM to 5 PM
2	Dr. Rajesh Singhai	General Physician	Mon to Sat (6 days in a week)	9 AM to 12 NOON
3	Dr. Arpana Bansal	Eye Specialist	Mon, Wed and Fri (3 days in a week)	1 PM to 3 PM
4	Dr. Bharat B. Sethi	Dentist	Mon, Wed and Fri (3 days in a week)	1 PM to 3 PM
5	Dr. Subodh Mor	Sports Medicine- cum- Physiotherapist (MPT)	Mon to Sat (6 days in a week)	1 PM to 4 PM
6	Dr. Dinesh Bansal	Orthopedician	Mon, Wed and Fri (3 days in a week)	1 PM to 3 PM
7	Dr. Gaurav Gupta	Psychiatrist	Tue and Thu (2 days in a week)	1 PM to 4 PM
8	Dr. Nishi Jha	Gynecologist	Tue and Thu (2 days in a week)	1 PM to 4 PM

PARAMEDICAL STAFF		
SH. ASHOK ROHILLA-PHYSIOTHERAPY ASSISTANT		
S. No.	Nursing Staff	Attendants
1	Ms. Milan Gupta	Sh. Govind Singh
2	Ms. Radhika Singh	Sh. Govind Choudhary
3	Ms. Anmol Jain	Ms. Rekha Devi
4	Ms. Priya Sharma	Sh. Amit Kumar
5	Ms. Antima	Sh. Kamal Arora
6	Sh. Ashish Rana	Ms. Geeta Parjapati

- New non-consumable items added such as
 - New Air Conditioners installed in all the departments,
 - New furniture such as tables, chairs, stools, benches & reception desk
 - RO Water purifier system.
 - Tea, coffee & soup making machine.
- Recently various medical diagnostic and procedural equipment have been added to further enhance the available capacity

and expertise of the University Health Centre such as

- Auto-refractometer
- New dental set up with latest accessories
- Physiotherapy equipment like tread mill machine
- Pulse-oximeter
- wo Oxygen concentrator with six oxygen cylinders
- Dental X-ray machine
- Renovation related to civil and electrical works carried out time to time nearly in all the departments of the health center.
- Purchase of new medical diagnostic and testing equipment is also under process.
- Sign/flex boards put at all the prominent places to display vital information related to emergency services details, depression, stress symptoms and management.
- First aid boxes procured through stores and purchase for the distribution in the departments and central utilities of the university.
- Salary of doctors hiked up to another 25%.
- Generic medicines inventory improved and expanded with the intake of new medicines including rabies vaccines.
- Under the University Student Internship Program [USIP] one such student was engaged to carry on routine assignments related to University Health Centre.
- Started the concepts of
 - online consultancy by the UHC doctors for all the stake holders during covid-19 pandemic.
 - feedback of the patients
 - monthly performance reports of doctors
- biometric attendance of theparamedical staff.
- A state of art isolation facility of six beds equipped with all the advance and necessary medical equipment for monitoring has been established at erstwhile Dean-International Affairs Office.
 - Appointment of new clinical psychologist is almost complete.
 - New doctors to be engaged very soon in the departments of
 - ENT
 - Dermatology
 - Ayurveda
 - Homeopathy
- Three qualified new nursing staff & four additional attendants were deputed to provide adequate nursing facility to all the stake holders viz., students, faculty staff etc.
- TI doubled from existing Rs 25,000/- to Rs 50,000/- to meet out the medicine and other consumables procurement expenditure.



13.6 Transport Office

Prof. Nitin Kumar Puri, Transport Officer

Sh. A.K. Chauhan, Transport Consultant

The university has established a transport office with the following vehicles which are available in the University for Official Duties time to time.

S. No.	Type Vehicle	Registration No.	Attached With	Drivers
1	Maruti Ciaz	DL-11CB-2685	Hon'ble VC	Sh. Amrender Jha (Out Source)
2	Honda City	DL-10CA-2100	Pro VC	Sh. Sukhwant Singh (Contractual)
3	Ambassador	DL-8C-NA-3902	General Pool	Sh. Updesh Saini (Contractual)
4	Scorpio	DL-4C-NB-4918	General Pool	Sh. Rishi Pal Singh (Out Source)
5	Omni Van	DL-5CD-9975	General Pool	Sh. Amit Tiwari (Out Source)
6	Ambulance	DL-1A-2507	Emergency and Trauma	Sh. Mukesh (Permanent)

The University also maintains a 35 seater CNG Bus (Swaraz Mazda, DL-1PC-3419) for the transportation of the University students and staff from nearest metro station (Badli/ Rithala) to the university campus seven times in a day the bus is also provided for various educational and industrial tours by the students in the nearby areas.

13.7 Dr. B. R. Ambedkar Auditorium

The University has equipped, fully air-conditioned, state of art audio visual infrastructure for web casting in an auditorium having seating capacity of six hundred and fifty.



13.8 Store and Purchase Department

The Stores section has a quality system of Inventory management, which involves updated records of all stores/equipment's received and issued to the user department, Annual Stock Verification and Disposal of obsolete/unserviceable stores/equipment.

The Purchase section has a quality procurement policy. The important Consideration in purchase of Goods or services are (a) Quality (b) Reliability (c) efficiency (d) accountability and (e) Economy – Efforts are being made to ensure placement of contract/ Purchase Order within the original validity of the bids. Specified quality and reliability of the supplier has to be taken into consideration with low cost involvement. The purchase procedure being followed in this University is based on the guidelines enumerated in the General Financial Rules 2017 and Manual of Procurement of Goods 2017.

This university has various committees of the faculties/officers for making purchases:

1. Central Purchase Committee (CPC): The committee has been constituted consisting of the senior faculty members for the purpose of scrutiny/ evaluation of all the purchase proposals of all the department of the University, which are having the estimated cost of the item more than `50 Lacs and submits its recommendation to the Vice Chancellor, DTU.
2. University Technical Evaluation Committee: The University Technical

Evaluation Committee (TEC) constituted for consideration, evaluation and clearance of purchase proposals of Computers, Computer Peripherals and Software's of various departments of the university.

3. Departmental Purchase Committee (DPC): The committee has been constituted at the department level under the Chairmanship of respective HOD of the Departments to securitize/ evaluate technical /financial bids of all the purchase proposals pertains to their department and to submit its recommendation to the Competent Authority.
4. Other than the above mentioned committees, the following committee are also constituted:
 - i) Stationery & Printing Committee and Miscellaneous Items Committee.
 - ii) Liveries Committee
 - iii) Chemical & Glassware Committee.
 - iv) Sports Council.

The Purchase office consists of the following employees for its smooth functioning.

Officer in charge store and purchase
 Section Officer Consultant (S & P) Chief store Keeper
 Junior Office Assistant (S & P) Assistant Store Keepers

13.9 Estate Office and Engineering Cell

Review of Existing Infrastructure

The Delhi Technological University Campus at Bawana Road, was raised in 1997-98. While the total campus plot area is 163.87 acres (663154.03sqm), only a part of it was constructed in the first phase of construction keeping in mind a target student population of 3,000 at that time. The approved area utilization norms followed areas under:

- Academic: 45% (73.23 Acres)
- Residential: 25% (40.68 Acres)
- Green/Open: 15% (24.41 Acres)
- Sports/Cultural: 15% (24.41 Acres)

Accordingly, the first phase of construction which was completed a round 1997-98 comprised of a total built up area of 1, 58,840.41 Sqm with the break-up as follows:

- Academic Area 69,146.03 Sqm.
- Hostel Area 50,607.40 Sqm.
- Residential Area 39,086.98 Sqm.

The details of administrative and academic blocks of Delhi Technological University along with its corresponding approximate ground coverage and covered area details are as given below:

Administrative and Academic Blocks

S. No.	Type of Block	Total Gr. Coverage (SqM)	Total Covered Area on all Floors (SqM)
1.	Administrative Block	1879.40	4063.66
2.	Electrical Block	9628.64	23684.49
3.	Electronics	9628.64	23684.49
4.	Civil Engineering Block	9628.64	23684.49
5.	Mechanical Engineering Block	4208.83	14291.10
6.	Workshop Block	3416.20	3416.20
7.	Faculty Block (Electrical Department)		1100
8.	Faculty Block (Civil Department)		1118
9.	Science Block	2817.43	8667.78

Existing Administrative and Academic Blocks

- Administrative Block
- Electrical, Electronics and Civil
- Engineering Blocks
- Mechanical Engineering Block
- Workshop Block
- Science Block

The details of various central administrative and academic facilities at Delhi Technological University along with its corresponding approximate ground coverage and covered area details areas given under:-

Central Administrative and Academic Facilities

S. No.	Description of Block	Student Capacity	Total Gr. Coverage (SqM)	Total Covered area on all floors (SqM)
1.	Main Library	400	2000.00	5500.00
2.	Computer Centre	300	1500.00	3000.00
3.	Multipurpose Lecture Theatre cum Seminar Hall (Auditorium)	550	2500.00	3000.00
4.	Senate Hall	45	72.00	72.00
5.	Exposition Hall	45	84.00	84.00
6.	Smart Class Room-I	90	144.00	144.00
7.	Smart Class Room-II	90	144.00	144.00
8.	Seminar Hall (RN307)	25	112.00	112.00
9.	Edusat Hall	40	-	-
10.	Record Room	---	650.00	650.00
11.	Department of Design	---	1500.00	3000.00
12.	Classroom Blocks	1008	900.00	1800.00
13.	Sewage Treatment Plant	1.0 MLD Capacity		
14.	Waste to Energy Plant	1.0 TPD Capacity		

Central Administrative and Academic Facilities

- Main Library
- Computer Centre
- Multipurpose Lecture Theatre cum Seminar Hall (Auditorium)
- Senate Hall
- Smart Class Room
- Seminar Hall

The details of existing hostel accommodation for boys and girl students including capacity of each hostel and corresponding approximate ground coverage and covered area details areas given below.

Existing Hostels

- JCB Hostel
- VMH Hostel

- CVR Hostel
- BCH Hostel
- HJB Hostel
- Ramanujam Hostel
- Aryabhata Hostel
- Type-II B-5
- KCH Hostel
- SNH Hostel
- Type-III Block 1 & 2 Girls Hostel

The details of residential accommodation for faculty and staff members including numbers of different type of houses with its corresponding approximate ground coverage and covered area details areas given below.

Residences

S. No	Type	No	Total Gr. Coverage (SqM)	Total Covered area on all floors (SqM)
1.	Type VI Residence	1	200.00	250.00
2.	Type V Residence	56	2984.68	11938.72
3.	Type IV Residence	60	15650.56	6262.24
4.	Type III Residences	45	878.28	3513.12
5.	Type II Residence	105	1679.37	6717.48
6.	Type I Residence	60	803.12	3212.48
7.	Total		327	

Residential Area

- Type-I, Residence
- Type-II, Residence
- Type-III, Residence
- Type-IV, Residence
- Type-V, Residence
- Type-VI, VC Residence

The details of various central amenities provided in the campus for resident's boys and girl students including capacity of each hostel and corresponding approximate ground coverage and covered area details are as given below.

S. No.	Description of Blocks	Total Gr. Coverage (SqM)	Total Covered area on all floors (SqM)
1	Guest House (8 Double Bedded Rooms)	414.46	828.92
2	State Bank of India	2984.68	2984.68
3	Post Office	878.28	878.28
4	12 bedded hospital	782.40	1267.00
5	Health Centre	800.00	800.00
6	Main Canteen	700.00	1500.00

Central Amenities Area

- State Bank of India
- Post Office
- 12 Bedded Hospital
- Nursery School (Currently used by PWD)
- Main Canteen

Master Plan 2021: Delhi Technological University

The overall master plan envisaged for the Delhi Technological University to be constructed in different phases is summarised below:-

Permissible	Land (%)	Area (Sq.m.)	Ground Cov. (Sq.m.)	FAR (Sq.m.)	Height (Mts.)
Academic	45%	296361	88908	30.00%	37
Residential	25%	164645	54876	33.33%	NR
Community Spaces, Sports and cultural	15%	98787	9879	10.00%	26

Permissible	Land	Area	Ground Cov.		FAR		Height
Parks and Landscaped Open Area	15%	98787					
Total		658581	153663		699742		
Existing	Land	Area	Ground Cov.		FAR		Height
	(%)	(Sq.M.)	(Sq.M.)		(Sq.M.)		(Mts.)
Academic	45%	296361	30673	10.35%	69146	23.33%	16
Residential	25%	164645	25284	15.36%	89694	54.48%	14.8
Community Spaces, Sports and cultural	15%	98787	850	0.86%	850	0.86%	3.6
Parks and Landscaped Open Area							
Total	15%	98787					
Total		658581	56807		159689		

Proposed	Land	Area	Ground Cov.		FAR		Height
Academic	45%	296361	39425	13.30%	241069	81.34%	36.45
Residential	25%	164645	29310	17.80%	189166	114.89%	41.85
Community Spaces, Sports and cultural	15%	98787	4060	4.11%	5846	5.92%	15
Parks and Landscaped Open Area	15%	98787					
Total		658581	72795		436081		
Total	Land	Area	Ground Cov.		FAR		Height
	(%)	(Sq.M.)	(Sq.M.)		(Sq.M.)		(Mts.)
Academic	45%	296361	70098	23.65%	310215	104.67%	36.45
Residential	25%	164645	54594	33.16%	278860	169.37%	41.85
Community Spaces	15%	98787	4910	4.97%	6696	6.78%	15
Ancillary Services	15%	98787					
Total		658581	129602		595771		

Infrastructure proposed to be constructed in Phase II (Stage 1)

A proposal for construction of various academic and hostel buildings is under active consideration of the Govt of NCT Delhi. The second phase of construction at DTU submitted to the Govt includes construction of:

Boys and Girls Hostels

- Academic Blocks for the Newly Added UG and PG programs.

- Built-up space for the ongoing and future research and development centres.
- Built-up space for School of Management and Centre for Innovation and Techno-entrepreneurship.
- The buildings proposed in Phase-II (Stage-I) and proposed area statement is as given below:-

S. No.	Building Names	Ground Coverage (Sq.m)	Built Up Area (Sq.m.)	No. of Storey
1	Boys Hostel H5	519	5895	B+G+11
2	Girls Hostel HG5	426	5937	B+G+11
3	Girls Hostel HG6	426	5937	B+G+11
4	Academic Block AB3	1809	18436	B+G+8
5	Academic Block AB4	2285	23198	B+G+8
	Total	5465	59403	

Expansion of DTU campus Ph-II: Phase-wise Construction plan



Proposed Buildings in Phase II with Existing Buildings of Phase-I

East Delhi Vivek Vihar Campus

The Hon'ble Lt. Governor, Delhi has pleased to allow the use of existing Campus of Shaheed Sukhdev College of Business Studies, University of Delhi, and Vivek Vihar for running East Campus of Delhi Technological University (DTU) on temporary basis. Consequent upon this,

new session for conducting various courses has been started at DTU East Delhi Campus at Vivek Vihar during the year 2017-18. Hon'ble Chief Minister of Delhi inaugurated the new Campus of DTU. The existing plot area of DTU East Delhi Campus at Vivek Vihar is 8341 Sqm. (2.06acre).The built up area comprising of the following buildings are as follows.

S. No.	Name of Building	Area (Sqm)	Remarks
1	Main Building	4,417.00	Four Storied
2	University School of Management and Entrepreneurship	576.68	Double Storied
3	Class Room Block-A & Canteen	382.11	Single Storey
4	Class Room Block-B	516.16	Double Storied
	Total		5,941.65

East Delhi (ITI Mayur Vihar) Campus



A piece of land measuring 4852.8sq.m. has been allotted initially in ITI Mayur Vihar Campus for Establishment of East Delhi Campus/ Constituent College of Delhi Technological University by the DTTE. For development of Campus the soil investigation work has already been carried out by PWD.

Ongoing Construction of a new Building in Delhi Technological University

- Raj Soin Hall (M.P. Hall)
- Academic Blocks
- Girls Hostels and Boys Hostel
- Cafeteria near Pragya Bhawan

14 Other Facilities

14.1 DTU Studio

- The Television Studio at Delhi Technological University is an example of Innovation and Industry Academia Collaboration. The spacious television studio can handle Pre-Production, Production and Post-Production activities for various activities like Interview, panel discussion, short plays, lectures, etc.
- DTU Studio comprises of a multi camera setup with lighting grids and a Teleprompter, Production control room with control panels which can handle multiple video and audio sources online and offline, Graphics and special effects generators, video edit suites with a Mac equipped with Final Cut Pro Video Editing software, Motion, Live-Type, EDIUS 9.0 video editing software and Photoshop CS6, etc.
- Our experienced and competent team of professionals renders these services by making use of ultra-modern technology with quality standards in tandem with exact requirements and necessities as required. The offered services are highly demanded for their unique characteristics such as reliable solution, flexible approach, hassle-free management, promptness and professional approach.
- The students of Delhi Technological University are engaging in a whole range of In-house and Outdoor production activities. These activities are widely admired for their timely execution, promptness and hassle-free operations. In addition to this, trouble free operation and promptness of these activities is our strength and are rendered in the best possible way.

1. Infrastructure

- DTU Studio is having facility of two studios at Delhi Technological University. It has the facility of Indoor production as well as Outdoor production. One of the studios has the facility of Teleprompter, Chroma keying with virtual studio sets and all necessary equipment for video production.
- DTU Studio is equipped with sophisticated high end broadcasting quality equipment for production like Three Sony studio camera, Two Camcorder, Two Still camera, One Non-Linear Editing machine Mac Pro with Final Cut Pro Video Editing software, One Dell Precision T 7500 Workstation, One 7 Dell Precision tower 7810 dual Intel Xeon Workstation, VT-5 Live switcher, Sony D-800 Live switcher, Newtek live audio and video switcher, Two Yamma O1V96 digital Audio Consol, Two lite-puter CV12.

2. Utilization

- DTU Studio is covering all university Events, International Conferences, Meet as well as the Global Initiative of Academic Networks (GIAN) in Higher Education Programs where renowned Experts faculty, Guest Lectures from internationally and national facility lectures are recorded.

3. Services being offered

- With the support of our in-house facilities, we are busy in offering Pre production, Production and Post Production Facility for recording various programs like Interview, Panel Discussion, short plays, lectures, etc. in the spacious television studio of the university located at the 1st

floor of Civil/Environment Engineering department.

- To offer these services, we have hired skilled and innovative professionals that hold in-depth knowledge and immense experience in their respective domain. The offered services are committed for their flexibility, reliability and timely execution.
- Apart from this, we are engaged in offering an impeccable quality of Outdoor Photography and Video Production Service with respect to suit the exact preferences as required. These services are available in various customized solutions as per the requirement. These services are widely admired for their timely execution, promptness and hassle-free operations.

YouTube Channel QR Code:



Videos uploaded on DTU Studio on YouTube channel of DTU Studio:

<https://www.youtube.com/c/dtustudio>

Video Title	Link
DTU Family Celebrate 74 th Independence Day-2020	https://youtu.be/OjNT5FjQnfl
1 st .Teaching Excellence Award Function-2020 Part-1	https://youtu.be/iRzp01Urhgs
1 st .Teaching Excellence Award Function-2020 Part-2	https://youtu.be/OhFIZzY6e4Q
Fit India Freedom Run DTU -2020	https://youtu.be/iI3OFCwuStg
BATLA HOUSE Encounter Real Story by Karnal Singh, Ex IPS Officer (BATLA House Encounter Team Leader)	https://youtu.be/mENyyl6ksyo
DTU Virtual Tour for Newly Admitted Student	https://youtu.be/Mr0ILMNcm0o
DASA-2020 Direct Admission Students of Abroad	https://youtu.be/X5tI7twlfd4
Orientation Programme-2020 Part-1	https://youtu.be/xC-n9e8LGO0
Orientation Programme-2020 Part-2	https://youtu.be/7pKFIrtr1ys
Orientation Programme-2020 Part-3	https://youtu.be/aWxYyZfZgHk
Orientation Programme-2020 Part-4	https://youtu.be/RjdJjhnZCM
Orientation Programme-2020 Part-5	https://youtu.be/Zwh5FcC61qM
Orientation Programme-2020 Part-6	https://youtu.be/ZLTQhnnJA1c
Orientation Programme-2020 Part-7	https://youtu.be/CWd1yK7RtjY

Video Title	Link
Orientation Programme-2020 Part-8	https://youtu.be/uzeK_uaKCUC
7 th Convocation 2020 Part-1 Addressing by Prof. Yogesh Singh Vice Chancellor, DTU	https://youtu.be/PxD-u5NrVLY
Hon'ble Deputy CM & Education Minister of Delhi, Addressing in 7 th Convocation-2020, DTU	https://youtu.be/rmK4xWGuAW8
7 th Convocation 2020 Part-3 addressing by Chief Guest Prof. D. Yogi Goswami	https://youtu.be/i9OkdISTdFA
7 th Convocation 2020 Part-4 II Administrating of Oath & LG Address read by Hon'ble Vice Chancellor	https://youtu.be/-ZQ5FRcWrlo
DTU New Year Celebration- Cricket Match (Vice Chancellor-XI Vs DTUiTs-XI) Part-1	https://youtu.be/rfS1892ohNI
DTU Cricket Match Highlight "Vice Chancellor-XI Vs DTUiTs-XI"	https://youtu.be/TaqbnZ5Xzyo
DTU PARAAKRAM Highlight II 1 st Sports meet for faculty & staff II DTU Sports Council	https://youtu.be/HLoiN6pTpMQ
How to determine the Strength of Sodium Hydroxide & Sodium Carbonate	https://youtu.be/GFBTFIQJsrA
To determine the concentration of dissolved oxygen	https://youtu.be/UPoL8xtANE0
How to determine the total alkalinity of given water sample	https://youtu.be/9sLgZkBDNsM
To determine the strength of free chlorine	https://youtu.be/-do0UZMZjrl
To determine the strength of Commercial Hydrochloric Acid	https://youtu.be/-XSyd2LPAXo
Research Excellence Awards Ceremony-2021 Part-1	https://youtu.be/5inX9fo3yPU
Research Excellence Awards Ceremony-2021 Part-2	https://youtu.be/xz8aFJrGR-Q
Research Excellence Awards Ceremony-2021 Part-3	https://youtu.be/TmqazxmMlOl
Manthan Hall, USME Inauguration Ceremony & Hon'ble, Vice Chancellor DTU, address	https://youtu.be/uJbjSRynKEs
Manthan Hall Inauguration Ceremony, Experience Sharing by Students of MBA-Family Business, Part-1	https://youtu.be/kGKGB-99aGE
Manthan Hall Inauguration Ceremony, Experience Sharing by Students of MBA-Family Business, Part-2	https://youtu.be/Gkar-LR5hIQ
DTU USME, MBA (FBE) Students Interaction with Hon'ble, Deputy CM & Minister of Education, Delhi	https://youtu.be/nEch2w1ZVfM
Glimpse of Samsung Digital Academy CSE DTU	https://youtu.be/EVAcYEZn-R4
Samsung Lab Inauguration Ceremony Part-1	https://youtu.be/HLqQR6QVs5s
Samsung Lab Inauguration Ceremony Part-2	https://youtu.be/Jh1AMDdSArS
Samsung Lab Inauguration Ceremony Part-3	https://youtu.be/XJL5YkCqH-M

Video Title	Link
Welcome Address by Dean (Alumni Affairs) at DCE-DTU Alumni association Governing Council	https://youtu.be/qReEeBTWbcE
Address by Dr. Muktesh Chandra, President DCE-DTU Alumni association Governing Council	https://youtu.be/OZoeq4_hrxA
Address by Shri Karnal Singh, IPS, Patron DCE-DTU Alumni association Governing Council Members	https://youtu.be/nQO34cEdH5g
Address by Vice Chancellor & Chief Patron, DCE-DTU Alumni association Governing Council Members	https://youtu.be/6gMOhFv-86o
LAB ON WHEEL Inauguration Ceremony Highlight Video 6 th April 2021	https://youtu.be/8GW3FU6cYE8
LAB ON WHEEL Welcome Address by Prof. Amit Srivastava, Associate Dean (OEA), DTU	https://youtu.be/CkT8X5glR3c
"LAB ON WHEEL" Inauguration Ceremony Experiences of Principals, Schools of Govt of NCT of delhi	https://youtu.be/e90_7kvjq7k
"LAB ON WHEEL" Experiences of Principals Student of Govt Schools & Students/Intern of DTU	https://youtu.be/hMLEh_CPej4
"LAB ON WHEEL" Inauguration Ceremony Address by Prof. Yogesh Singh, Hon'ble Vice Chancellor DTU.	https://youtu.be/vuslox6l8-0
Address by Shri Udit Prakash Rai, Director, Department of Education, Govt. of NCT of Delhi	https://youtu.be/zym6Oukf0TY
Address by Dr. S.B. Deepak Kumar, Director, Secretary (TTE), Govt. of NCT of Delhi	https://youtu.be/VN1x0ltseWw
"LAB ON WHEEL" Inauguration Ceremony Address by Shri Manish Sisodia Hon'ble Deputy Chief Minister	https://youtu.be/Ac0rMg4-KLE

14.2 University Guest House

- The guest house within the campus is meant for the staying purpose of individuals visiting DTU. The rooms are comfortable with all modern facilities available within. It consists of eight double bedded rooms. Prof. Rajesh Rohilla, Professor in Department of Electronics Engineering is the officer in charge.

15 University Accounts

DELHI TECHNOLOGICAL UNIVERSITY Balance Sheet as at 31st March, 2021

	Schedule	As at 31-03-2021	As at 31-03-2020
		(Rs)	(Rs)
SOURCES OF FUNDS			
CAPITAL FUND	1	3,990,871,918.20	3,627,531,575.37
CORPUS FUND	1A	437,375,419.00	438,359,478.00
DESIGNATED/EARMARKED/ ENDOWMENT FUNDS	2	1,953,262,697.22	1,461,953,098.49
CURRENT LIABILITIES AND PROVISIONS	3	258,690,648.00	80,534,696.46
TOTAL		6,640,200,682.42	5,608,378,848.32
APPLICATION OF FUNDS			
FIXED ASSETS	4		
TANGIBLE ASSETS		3,295,920,431.34	2,955,073,888.67
INTANGIBLE ASSETS		8,760,944.85	12,271,055.09
CAPITAL WORK IN PROGRESS		189,287,440.00	189,300,926.00
INVESTMENTS	5		
LONG TERM		-	-
INVESTMENTS - OTHERS	6	-	-
CURRENT ASSETS	7	3,088,738,395.23	2,395,516,928.86
LOANS,ADVANCES AND DEPOSITS	8	57,493,471.00	56,216,049.70
TOTAL		6,640,200,682.42	5,608,378,848.32
SIGNIFICANT ACCOUNTING POLICIES & NOTES TO ACCOUNTS	23		

Sd/-
Ajay Kumar Gupta
(Partner)
Chartered Accountants
M.A.M. & Associates

Sd/-
Jasbir Singh
(Sr. AO-I)

Sd/-
Jaspal Singh
(Sr.AO/DDO)

Sd/-
Prof. Nirendra Dev
(Controller of Finance)

Sd/-
Prof. Madhusudan
Singh
(Registrar)

Place : New Delhi
Dated : 20th September, 2021

Sd/-
Prof. Yogesh Singh
(Hon'ble VC, DTU)

DELHI TECHNOLOGICAL UNIVERSITY

Income and Expenditure Account for the Year ended 31st March, 2021

	Schedule	2020-2021 (Rs)	2019-2020 (Rs)
INCOME			
Academic Receipts	9	1,306,188,000.14	1,090,063,422.17
Grant in Aid	10	250,000,000.00	260,000,000.00
Income From Investments	11	12,319,335.00	38,199,926.00
Interest Earned	12	-	-
Other Incomes	13	49,409,203.37	64,508,881.72
Prior Period Income	14	-	62,216,162.00
TOTAL (A)		1,617,916,538.51	1,514,988,391.89
EXPENDITURE			
Staff Payments & Benefits (Establishment Expenses)	15	897,084,404.00	1,019,317,971.00
Academic Expenses	16	76,334,332.00	81,947,372.00
Administrative and General Expenses	17	267,191,650.04	286,544,369.95
Transportation Expenses	18	112,999.00	156,395.00
Repair and Maintenance	19	107,415,063.00	43,845,193.00
Finance Costs	20	480,683.40	178,205.08
Depreciation	4	229,895,651.00	158,862,022.00
Other Expenses	21	-	-
Prior Period Expenses	22	-	-
TOTAL (B)		1,578,514,782.44	1,590,851,528.03
Balance being Excess of Income over Expenditure		39,401,756.07	(75,863,136.14)
Transfer To/From Designated Fund		-	-
Building Fund		-	-
Provision for Gratuity		200,000,000.00	-
Balance Being Surplus/(Deficit) Carried To Capital Fund		(160,598,243.93)	(75,863,136.14)
SIGNIFICANT ACCOUNTING POLICIES & NOTES TO ACCOUNTS	23		

Sd/-
Ajay Kumar Gupta
(Partner)
Chartered Accountants
M.A.M. & Associates

Sd/-
Jasbir Singh
(Sr. AO-I)

Sd/-
Jaspal Singh
(Sr.AO/DDO)

Sd/-
Prof. Nirendra Dev
(Controller of Finance)

Sd/-
Prof. Madhusudan
Singh
(Registrar)

Place : New Delhi
Dated : 20th September, 2021

Sd/-
Prof. Yogesh Singh
(Hon'ble VC, DTU)

DELHI TECHNOLOGICAL UNIVERSITY

Receipts and Payment Account for the Year Ended 31st March, 2021

Amount in Rupees					
RECEIPTS	2020-2021	2019-2020	PAYMENTS	2020-2021	2019-2020
I. Opening Balance			I. Payments		
a) Cash Balance	-	-	a) Establishment Expenses	897,084,404.00	1,019,317,971.00
b) Bank Balance			b) Academic Expenses	76,334,332.00	81,947,372.00
(i) In Current accounts	461,469,204.06	367,807,450.83	c) Administrative Expenses	267,191,650.04	286,544,369.95
(ii) In Deposit accounts	144,740,408.80	1,821,330,759.00	d) Transportation Expenses	112,999.00	156,395.00
(iii) Saving accounts	1,789,104,205.00	95,279,147.04	e) Repair and Maintenance	107,415,063.00	43,845,193.00
			f) Finance Costs	480,683.40	178,205.08
			g) Prior Period Expenses	-	-
II. Grant Received			II. Payments against Earmarked / Endowment Fund	589,350,760.01	789,367,530.06
a) From Government of India	-	-			
b) From State Government					
(i) For Capital Expenditure	30,000,000.00	7,500,000.00			
(ii) For Revenue Expenditure	250,000,000.00	260,000,000.00			
c) From Other sources (details)	-	-			
(Grants for capital & revenue exp / to be shown separately if available)					
III. Academic Receipts	1,306,188,000.14	1,090,063,422.17	III. Payment against Sponsored Projects/Schemes	-	-
IV. Receipts against Earmarked/ Endowment Funds	1,041,701,455.50	864,798,979.19	IV. Expenditure Out of Corpus Fund	28,902,588.00	37,949,692.00

Amount in Rupees					
RECEIPTS	2020-2021	2019-2020	PAYMENTS	2020-2021	2019-2020
V. Receipts against Corpus Fund	72,000.00	101,000.00	V. Investment and Deposits made		
			a) Out of Earmarked / Endowment Funds		
			b) Out of own funds (Investments-Others)		
VI. Receipts against Sponsored Fellowships and Scholarships			VI. Term Deposits with Scheduled Banks		
VII. Income on Investments from			VII. Expenditure on Fixed Assets and Capital Works - in - Progress		
a) Earmarked / Endowment funds	77,870,714.00	76,732,960.00	a) Fixed Assets	128,376,882.73	150,969,701.76
b) Other Investments	41,905,499.00	97,160,208.00	b) Capital Works - in -Progress	677,064.00	-
c) Corpus Fund					
VIII. Interest Received on			VIII. Other Payments including Statutory payments	265,619,892.22	327,726,562.75
a) Bank Deposits	-	-			
b) Loan and Advances	-	-			
c) Saving Bank Accounts	5,694,630.00	4,360,604.00			
IX. Investments encashed	0	-	IX. Refund of Grants	-	-
X. Term Deposits with Scheduled Banks encashed	-	-	X. Deposits and Advances	29,000.00	-
XI. Other Income (including Prior Period Income)	-	62,013,051.00	XI. Other Payments	-	-
XII. Deposits and Advances	-	-	XII. Closing Balance	-	-


Amount in Rupees					
RECEIPTS	2020-2021	2019-2020	PAYMENTS	2020-2021	2019-2020
			a) Cash in hand	-	-
			a) Bank Balance		
			In Current accounts	578,354,684.93	461,469,204.06
			In Saving accounts	204,473,798.30	144,740,408.80
			In Deposit accounts	2,300,908,364.00	1,789,104,205.00
XIII. Miscellaneous Receipts including Statutory Receipts.	296566049.13	386169229.23			
XIV. Any other Receipts					
Total	5,445,312,165.63	5,133,316,810.46	Total	5,445,312,165.63	5,133,316,810.46

	Sd/-	Sd/-	Sd/-	Sd/-
Ajay Kumar Gupta (Partner) Chartered Accountants M.A.M. & Associates	Jasbir Singh (Sr. AO-I)	Jaspal Singh (Sr.AO/DDO)	Prof. Nirendra Dev (Controller of Finance)	Prof. Madhusudan Singh (Registrar)
				Prof. Yogesh Singh (Hon'ble VC, DTU)

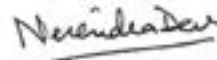
Place : New Delhi
Dated : 20th September, 2021

<u>DELHI TECHNOLOGICAL UNIVERSITY</u> <u>BALANCE SHEET AS AT 31st MARCH, 2021</u>			
	Schedule	As at 31-03-2021 (Rs)	As at 31-03-2020 (Rs)
SOURCES OF FUNDS			
CAPITAL FUND	1	3,99,08,71,918.20	3,62,75,31,575.37
CORPUS FUND	1A	43,73,75,419.00	43,83,59,478.00
DESIGNATED/EARMARKED/ENDOWMENT FUNDS	2	1,95,32,62,697.22	1,46,19,53,098.41
CURRENT LIABILITIES AND PROVISIONS	3	25,86,90,648.00	8,03,34,696.41
TOTAL		6,64,02,00,682.42	5,60,83,78,848.19
APPLICATION OF FUNDS			
FIXED ASSETS			
Tangible Assets	4	3,29,59,20,431.34	2,95,50,73,888.67
Intangible Assets		87,60,944.85	1,22,71,855.01
Capital Work In Progress		18,92,87,446.00	18,93,00,926.00
INVESTMENTS			
Long Term	5	-	-
INVESTMENTS - OTHERS			
	6	-	-
CURRENT ASSETS			
	7	3,08,87,38,395.23	2,39,55,16,928.81
LOANS, ADVANCES AND DEPOSITS			
	8	5,74,93,471.00	5,62,16,049.71
TOTAL		6,64,02,00,682.42	5,60,83,78,848.19
SIGNIFICANT ACCOUNTING POLICIES & NOTES TO ACCOUNTS			
	23		

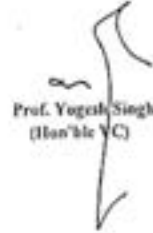
For Delhi Technological University


Ashish Singh
(Sr. AO-I)



Jyoti Singh
(Sr. AO/DDO)


Narendra Dev
(Controller of Finance)


Prof. Madhusudan Singh
(Registrar)


Prof. Yogesh Singh
(Hon'ble VC)

For M.A.M & Associates
Chartered Accountants


Ajay Kumar Gupta
(Partner)
M.No. 095290



Place : New Delhi
Dated : 20th September, 2021

DELHI TECHNOLOGICAL UNIVERSITY
INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2021

	Schedule	2020-2021 (Rs)	2019-2020 (Rs)
INCOME			
Academic Receipts	9	1,36,61,88,000.14	1,09,00,63,422.17
Grant in Aid	10	25,00,00,000.00	26,00,00,000.00
Income From Investments	11	1,23,19,335.00	3,81,99,916.00
Interest Earned	12	-	-
Other Income	13	4,94,09,203.37	6,45,08,881.72
Prior Period Income	14	-	6,22,16,162.00
TOTAL (A)		1,61,79,16,538.51	1,51,49,88,991.89
EXPENDITURE			
Staff Payments & Benefits (Establishment Expenses)	15	89,78,84,404.00	1,01,93,17,971.00
Academic Expenses	16	7,63,34,332.00	8,35,47,372.00
Administrative and General Expenses	17	26,71,91,650.04	28,65,44,369.95
Transportation Expenses	18	1,37,999.00	1,56,395.00
Repair and Maintenance	19	10,74,15,063.00	4,28,45,193.00
Finance Costs	20	4,80,683.00	1,78,205.00
Depreciation	4	22,98,95,651.00	15,88,62,022.00
Other Expenses	21	-	-
Prior Period Expenses	22	-	-
TOTAL (B)		1,57,88,14,782.04	1,59,08,51,528.03
Balance being Excess of Income over Expenditure		3,94,01,756.07	(7,58,63,136.14)
Transfer To/From Designated Fund		-	-
Building Fund		20,00,00,000.00	-
Provision for Gratuity		-	-
Balance being Surplus/(Deficit) Carried To Capital Fund		(16,05,58,243.93)	(7,58,63,136.14)

SIGNIFICANT ACCOUNTING POLICIES & NOTES TO ACCOUNTS 23

For Delhi Technological University


Jasbir Singh
(Sr. AO-2)


Jaspal Singh
(Sr. AO/DDO)


Narendra Dev
(Controller of Finance)


Prof. Madhusudan Singh
(Registrar)


Prof. Yogesh Singh
(Hon'ble VC)

For M.M. & Associates*
Chartered Accountants


Ajay Kumar Gupta
(Partner)

M.No. 095299

Place: New Delhi

Dated: 20th September, 2021



DELHI TECHNOLOGICAL UNIVERSITY
RECEIPTS AND PAYMENT ACCOUNT FOR THE YEAR ENDING 31st MARCH, 2021

	RECEIPTS		PAYMENTS		Amount in Rupees 2019-2020	Amount in Rupees 2020-2021
	2020-2021	2019-2020	2020-2021	2019-2020		
I. Opening Balance						
a) Cash Balance	-	-				1,01,53,17,971.00
b) Bank Balance						8,19,47,372.00
L. In Current accounts	46,14,69,204.06	36,78,07,450.83				26,65,44,369.95
ii. In Deposit accounts	14,47,40,608.80	1,82,13,26,759.00				1,56,365.00
iii. Saving accounts	1,78,91,04,205.00	9,52,79,147.04				4,38,45,193.00
						1,78,205.08
II. Grant Received						
a) From Government of India	-	-				54,93,50,760.81
b) From State Government						78,93,67,530.66
(I) For Capital Expenditure	3,00,00,000.00	75,00,000.00				
(II) For Revenue Expenditure	25,00,00,000.00	26,40,00,000.00				
(Grants for capital & revenue exp / to be shown separately if available)						
III. Academic Receipts	1,20,51,88,000.14	1,09,00,63,422.17				
IV. Receipts against Earmarked / Endowment Funds	1,94,17,01,455.50	86,47,98,979.19				3,79,49,692.00
V. Receipts against Corpus Fund	72,000.00	1,01,000.00				
VI. Receipts against Sponsored Fellowships and Scholarships						
VII. Income on Investments from						
a) Earmarked / Endowment funds	7,78,70,714.00	7,67,32,940.00				
b) Other Investments	4,19,65,499.00	9,71,60,268.00				15,09,69,791.76
c) Corpus Fund						6,77,664.00
VIII. Interest Received on						
a) Bank Deposits						26,56,19,892.22
b) Loan and Advances						
c) Saving Bank Accounts	56,94,630.00	43,60,604.00				31,77,26,562.75



IX. Investments encashed	0	-	IX. Refund of Grants	-	-
X. Terms Deposits with Scheduled Banks encashed	-	-	X. Deposits and Advances	20,000.00	-
XI. Other Income (including Prior Period Income)	-	62,013,051.00	XI. Other Payments	-	-
XII. Deposits and Advances	-	-	XII. Closing Balance	-	-
			a) Cash in hand		
			a) Bank Balance		
			In Current accounts	578,354,684.93	461,449,284.06
			In Saving accounts	264,473,793.30	144,740,498.80
			In Deposit accounts	2,890,908,364.00	1,789,104,285.00
XIII. Miscellaneous Receipts including Statutory Receipts.	256566049.13	366169225.23			
XIV. Any other Receipts	-	-			
Total	5,445,312,165.63	5,133,316,810.46	Total	5,445,312,165.63	5,133,316,810.46

For Delhi Technological University

Jaishir Singh
(Sr. A.O-I)

Jaishir Singh
(Sr. A.O/DBO)

on
Prof. Yogesh Singh
(Hon'ble VC)

Narendra Dev
Narendra Dev
(Controller of Finance)

Narendra
Prof. Madhusudan Singh
(Registrar)

For M.A.M & Associates
Chartered Accountants

Rampr
Ajay Kumar Gupta
(Partner)
M.No. 0953390

Place : New Delhi
Dated : 20th September, 2021



DTU RANKINGS 2021



TIMES ENGINEERING

TIMES TOP 175 Engineering Institute Rankings 2021

Optimal Media Solutions

Partnered with Avance India to conduct its seventh Engineering Institute 2021 survey to determine the top engineering institutes in India.

RANK	ENGINEERING INSTITUTES
1	Indian Institute of Technology, Bhubaneswar
2	DELHI TECHNOLOGICAL UNIVERSITY, DELHI
3	SRM Institute of Science and Technology, Chennai
4	College of Engineering, Pune
5	Netaji Subhas University of Technology, Delhi
6	Birla Institute of Technology and Science, Pilani
7	Koneru Lakshmaiah Education Foundation (KLEF) Deemed to be University, Vijayawada
8	Sathyabama Institute of Science and Technology, Chennai
9	BMS College of Engineering, Bengaluru
10	PSG College of Technology, Coimbatore
11	Nirma Institute of Technology, Nirma University, Ahmedabad
12	LD Collage of Engineering, Ahmedabad
13	Institute of Engineering & Management (IEM), Kolkata
14	K.J. Somaiya College Of Engineering, Mumbai
15	Faculty of Engineering & Technology (Manav Rachna International Institute of Research & Studies), Faridabad
16	REVA University, Bengaluru
17	JIS College of Engineering, Kalyani
18	ICFAI Tech, Hyderabad
19	Bharati Vidyapeeth Deemed University College of Engineering, Pune
20	Hindustan Institute of Technology & Science (Deemed To Be University), Chennai



DELHI TECHNOLOGICAL UNIVERSITY

INDIA TODAY RANKING 2021

TOP 10 GOVERNMENT COLLEGES

1	Indian Institute of Technology (IIT), Delhi
2	Indian Institute of Technology (IIT), Bombay
3	Indian Institute of Technology (IIT), Kanpur
4	Indian Institute of Technology (IIT), Kharagpur
5	Indian Institute of Technology (IIT), Roorkee
6	Indian Institute of Technology (IIT), Guwahati
7	Delhi Technological University, Delhi
8	Netaji Subhas University of Technology, Delhi
9	National Institute of Technology, Tiruchirappalli
10	Indian Institute of Information Technology (IIIT), Allahabad

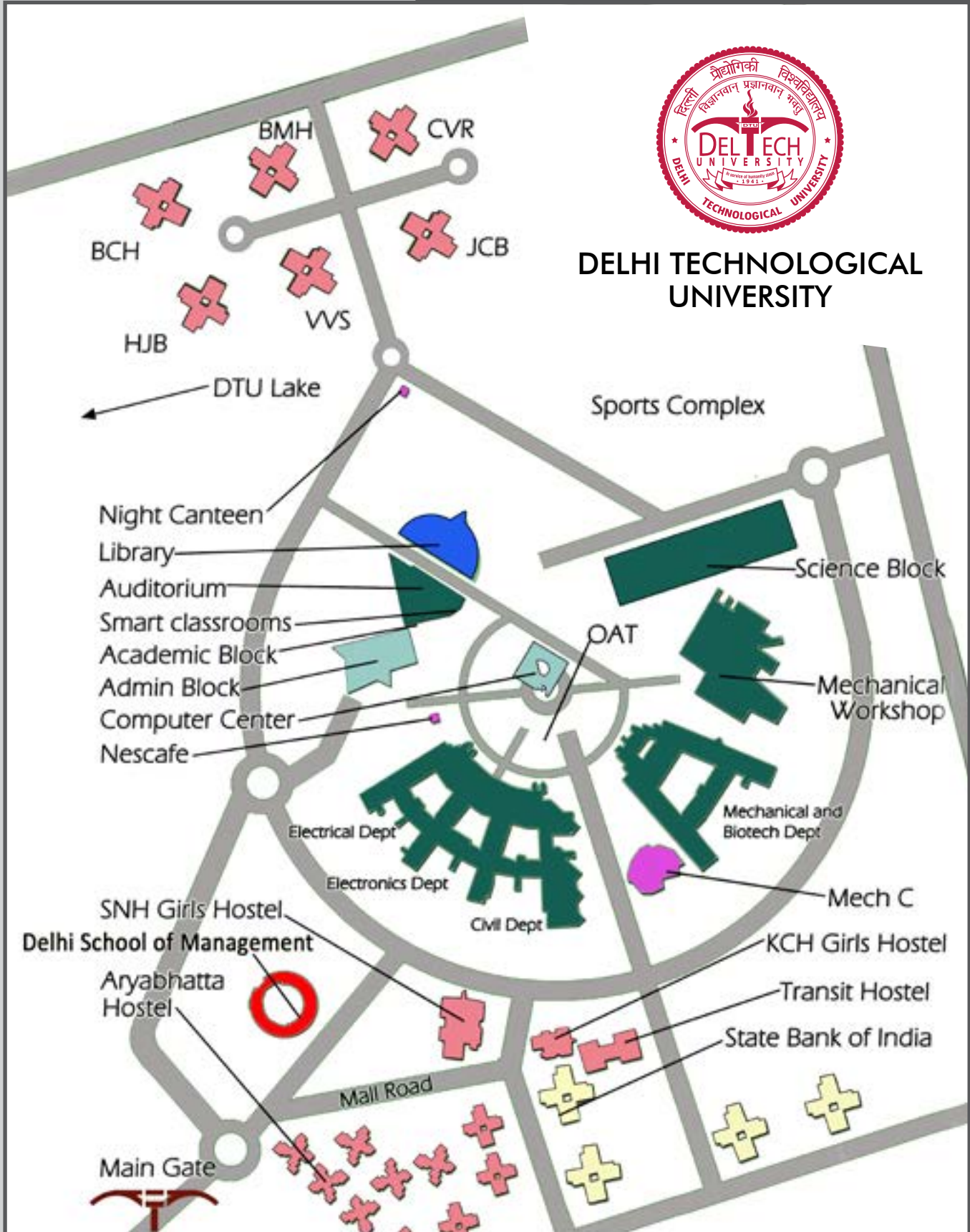








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