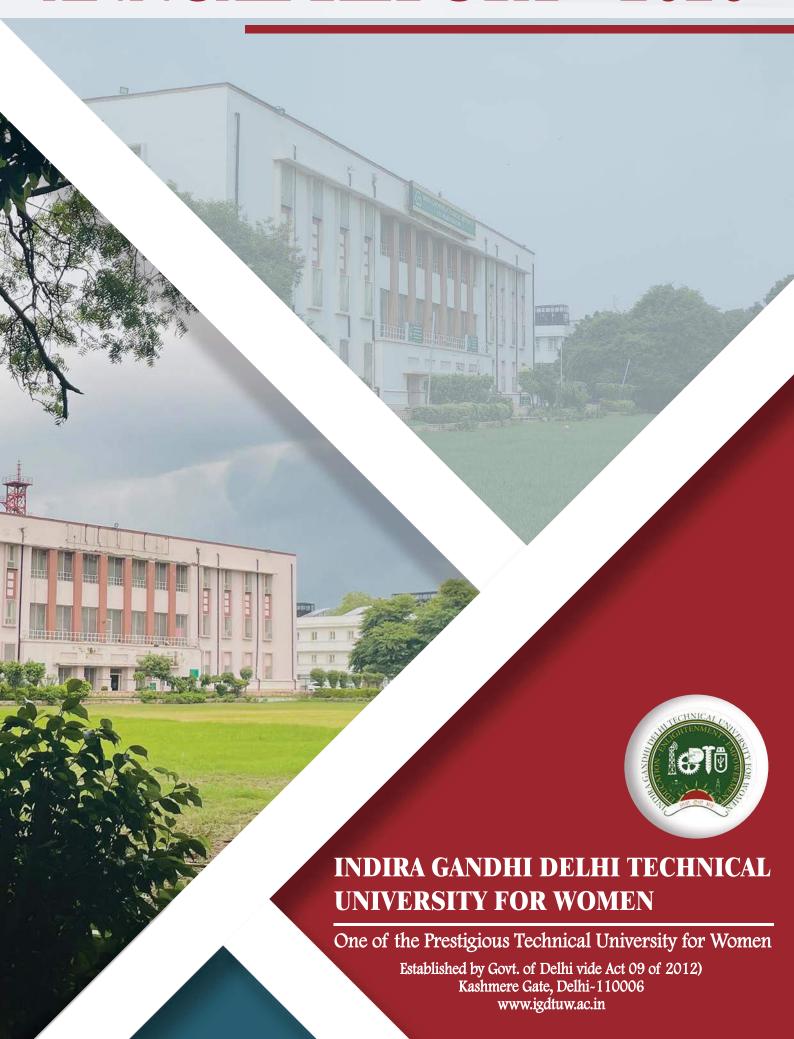
ANNUAL REPORT - 2020



Genesis / History

Housed in a serene lush green Campus spread over 60 acres, Indira Gandhi Delhi Technical University for Women (IGDTUW) was established in the year 2013 vide Delhi State Legislature Act 9, 2012 with a mission to evolve and develop skill-based systems for effective delivery of knowledge and to equip young Women with dedication and commitment to excel in all spheres of life. It was founded as the Indira Gandhi Institute of Technology in 1998 and was the only constituent college of Guru Gobind Singh Indraprastha University. In May 2013, it gained autonomy and became the first Women's technical University in India established by Govt. of Delhi.



To make India a Knowledge Society and a Knowledge Economy by empowering the women of our country, through education in Engineering, Science, Architecture and Technology. To become a leading technical University in the country known for its value-based quality technical education, supported with industry relevant research with focus on environmental and social issues.



- ❖ To foster an environment for excellence in professional education and ensure active participation of women in the field of Engineering, Science and Architecture, while striking out a work-life balance.
- ❖ To start new professional courses for Women in sun-rise disciplines and form alliances with industry to impart industry relevant education



- ❖ To emancipate Women through pursuit of knowledge enabling them to gain equal status in society through realization of their rights and responsibilities.
- ❖ To develop sustainable systems and state-of-the-art infrastructure to enable the Indian women to become the future leaders, managers, researchers and productive team players in the field of Science, Technology and Management.

The University is committed to make the student's educational experience multifaceted and holistic. By providing young women with higher learning, IGDTUW is performing one of the most important tasks for society. One cannot think of a well-informed society, until its women are educated. Our goal is to expand the reach of education and ensure that opportunities to learn are within the reach of all women and girls. IGDTUW is continuously striving to empower the students as we strongly believe that "An enlightened woman is the source of infinite power."

It is rightly quoted that: -

"When women are empowered, a society with stability is assured."

by Dr. A.P.J. Abdul Kalam

IGDTUW's farsightedness to make India a knowledge society by empowering women has been nationally recognized and well-acclaimed. With a very humble beginning, IGDTUW is still very young but a very vibrant University. In such a short span of time the University has got a very high visibility and has been recognized as an institution that is involved in a very high-quality Teaching and Research in diverse fields. IGDTUW over the past year has tried to build upon the following fronts:

- 1) Teaching/Learning & Resources
- 2) Research and Innovation
- 3) Graduation Outcome
- 4) Outreach & Inclusivity
- 5) Entrepreneurship



During the uncertain times of COVID-19, the University left no stone unturned and strived hard in achieving the success by adopting and shifting to newer means of imparting education and conducting events online.

- 1. As a matter of pride, the University ranked 2nd under Women Colleges and Universities and in "Atal Ranking of Institutions on Innovation Achievements (ARIIA)-2020" awarded by Hon'ble Vice President of India on 18th August, 2020.
- 2. 77th position in the overall "World's Universities with Real Impact (WURI) Ranking", as the Innovative Universities for 2020" has been another feather in the cap for achievements for IGDTUW. The University also bagged 21st position in the special category "Entrepreneurial Spirit of WURI ranking, 2020".
- 3. IGDTUW stood 19th among the "Top 25 Engineering Colleges/Universities of India" and also bagged a position under the category "College with the best value for Money." (Source: INDIA TODAY Survey, June 2020)
- **4.** In "The Times Annual Engineering Institute Survey-2020", IGDTUW bagged following remarkable ranks and positions:
 - Ranked "3rd in the Top Emerging Institutes" Placement Category
 - Ranked "4th in the Emerging Engineering Institutes" Research Capability
 Category
 - Ranked "Among top 5 Engineering Institutes" Emerging Category
- 5. IGDTUW is the only government university in India which has been selected by QS I QUAGE for the award of "E LEAD INSTITUTE for E-Learning Excellence for Academic Digitization"
- 6. IGDTUW has been awarded with a "Diamond University (Diamond Rating)" by QS

 I-Gauge (Indian College & University Rating)
- 7. IGDTUW has been conferred "Sushma Swaraj STREE Shakti Samman" on 25th September 2020 for its vision and outstanding commitment for Women Education and Women Empowerment.



The University is committed to improve access to, and widening participation in, higher education. The University set out how it intends to attract and support students in applying to, and studying at, IGDTUW

The University conducted Admissions-2020 to B.Tech. & B.Arch. Programme jointly with three other leading Technical Universities- IITD, NSUT and DTU through Joint Admission Counselling (JAC). Centralized counselling was arranged for admission into various programmes at Indira Gandhi Delhi Technical University for Women (IGDTUW), Indraprastha Institute of Information Technology (IIIT Delhi), Netaji Subhas University of Technology erstwhile (NSUT) and Delhi Technological University (DTU). One seat is reserved for Kashmiri Migrant (KM) in UG and PG Programmes.

IGDTUW STUDENT INTAKE 2020-21

S. No.	Title of Programme	Student
		Intake
1.	B.Tech (Computer Science & Engineering)	192
2.	B.Tech.(Electronics & Communication Engineering)	150
3.	B.Tech. (Mechanical & Automation Engineering)	95
4.	B.Tech. (Information Technology)	150
5.	B.Tech (Computer Science Engineering - Artificial Intelligence)	76
6.	B. Arch. (Architecture & Planning)	50
7	Bachelor of Business Administration (BBA)	76
8.	B.Tech (MAE)+ MBA (Dual Degree Programme)	30
9.	Masters in Computer Application (MCA)	76
10.	Master's in Business Administration (MBA)	76
11.	M.Tech. (Artificial Intelligence)	33
12.	M.Tech. (VLSI design)	32
13	M.Tech. (Information Security Management)	32
14	M.Tech. (Robotics & Automation)	32
15.	M.Plan (Urban Planning)	26
16	Ph.D. (Applied Sciences, Engineering & Humanities)	33
	Total	1159

Students at IGDTUW learn beyond the boundaries of curricula blended with professional ethics, besides social and cultural values which eventually shape up their personality not only as good responsible citizens but also Technical Professional with Excellence at par. The university organized online Orientation Programme for the newly admitted students in this year to familiarize them with the new ambience and programmes. The profound intellect of the students compounded with the right mentorship by experienced faculties continues to build the Legacy of Excellence.



IGDTUW has strived hard to build a strong Academic Curriculum under Choice Based Credit System which offers **Horizontal Flexibility and Vertical Mobility** to the students with vast variety of Electives and MOOC courses. Academic innovations have always been top most in the priorities of the University. With globalisation, Artificial Intelligence and Industry 4.0with the march of technology, the life of an engineer is changing rapidly. Today's graduates need to be flexible, to be able to learn quickly, to be able to innovate to produce products and services that can cater to the local needs and global standards. All of our programmes have been designed to produce Technical and Professional leaders including Entrepreneurs and designers for the future India.

The curriculum has a broad base of courses in Architecture, Engineering, Management and Humanities. The syllabusis continuously updated and new courses are added from time to time. Academic Council and the Boards of Studies have representations from industry in addition to academicians from top Academic Institutions.

Currently IGDTUW offers Undergraduate, Postgraduate and Doctorate programmes in the following disciplines:

S. No.	Title of Programme	Level	Duration (years)
1.	B.Tech. (Computer Science & Engineering)	UG	4
2.	B.Tech.(Electronics & Communication Engineering)	UG	4
3.	B.Tech. (Mechanical & Automation Engineering)	UG	4
4.	B.Tech. (Information Technology)	UG	4
5.	B.Tech. (Computer Science & Engineering – Artificial	UG	4
	Intelligence)		
6.	B. Arch. (Architecture & Planning)	UG	5
7.	Bachelor of Business Administration (BBA)	UG	3
8.	B.Tech. (MAE) + MBA (Dual Degree Programme)	UG+PG	6
9.	Masters in Computer Application (MCA)	PG	2
10.	Master's in Business Administration (MBA)	PG	2
11.	M.Tech. (Artificial Intelligence)	PG	2
12.	M.Tech. (VLSI design)	PG	2
13.	M.Tech. (Information Security Management)	PG	2
14.	M.Tech. (Robotics & Automation)	PG	2
15.	M.Plan. (Urban Planning)	PG	2
16.	Ph.D. (Applied Sciences, Engineering & Humanities)	Ph.D.	-

IGDTUW provides higher education in Advance and emerging areas for the women of our country. IGDTUW continues to make forays into newer territories pertinent to postgraduate education to meet the contemporary demands of the industry and research organisations.

Our university is constantly upgrading its infrastructure by adding new classrooms, studios and labs in various Departments. Up-gradation and maintenance of existing building facade is sensitively done keeping in mind the heritage value of the campus. The University hostel provides state of the art facilities and the numbers of seats are approximately 400 for the session, 2020-21. The campus is completely self-reliant as it offers all amenities and essential facilities like Learning Resource Centre, Library, Computer Centre, Dispensary, Bank, Common Room, Recreational Area, Guest House etc.



PLACEMENTS HIGHLIGHTS (CSE, IT, ECE)

The **Placement Season for the batch 2019-20** started with the high note and more than 80 companies visited the campus for about 277 Full Time Offers, 43 Pre-Placement Offers and more than 173 Internship Offers. Thus about 465 offers were received by students in the year 2019-20 during the On-Campus Drives. The CTC of Rs.43.3 Lakhs from Microsoft IDC and Internship package of Rs.1.5 Lakhs per month from Uber were the highest in each category.

It is a matter of stupendous pride to share that compared to the last year 2018-19, there has been a rise in average CTC from 10.3 Lakhs per annum to 13.33 Lakhs per annum and a rise in highest package from 41.6 Lakhs to 43.3 Lakhs.

Many of our students have been placed in renowned National and Multinational companies. We are honoured to have corporate giants like Google, Microsoft, Uber, Intuit, Goldman Sachs, American Express, Walmart, Netapp, Cisco, GE, Nestle, Siemens, Accenture, TCS, DELL, Qualcomm, Mahindra & Mahindra, Maruti, Honda, Bajaj Automobile, MG Motor, Tata Motors, Nestle, Eaton, HUL, Ather Energy, Siemens, Honeywell, Cameron, Fluor Daniel, and list is endless, visiting us annually and offering great opportunities to our students.

In the **Placement Season 2020-21** till now, more than 300 Full Time offers and about 203 Internship offers (for summer internship-2021) have been bagged by the students. This season, till date, the highest annual package offering for full time is 59.45 Lakhs CTC by Google-India, with internship package of 1.6 Lakh, by Uber for the 2021 summers. The placement season started on a high note with more than 55% of the current Full-time offers being above 14 Lakhs CTC so far and a commendable increase in the number of Pre-Placement offers.

There has been an exponential growth and the current placement statistics stand true to this testament. IGDTUW students, faculty and staff expects that this trend will continue throughout the placement season and companies will continue to reiterate the ever- increasing confidence on IGDTUW.

New companies that visited us for the first time this academic year2020-21 are: Atlassian, BNY Mellon, Zomato, Adidas, Wells Fargo, Standard Chartered, Grant Thornton, Confluent,

Athenahealth, Barclays, AppDynamics, Testbook, Ericsson India, Analog Devices Marvell Semiconductors, DE Shaw, JTG, Teradata and PhonePe.

The huge number (92) of pre-placement offers bagged by students in these pandemic times and new recruiters constantly coming to the campus to hire shows the promise and reputation that the students have built for the University.

Atlassian offered package of 51.5 CTC, came for the first time and hired 9 students, the highest number from any university in India in this season. Microsoft IDC has offered 20 Full time and 40 summer internships-2021 offers. Google visited IGDTUW campus for Kickstart Roadshow, both in 2019, when it was held on campus and this year in September 2020, when it took place virtually. This event received an overwhelming response from the girls at IGDTUW, who showed great zeal, enthusiasm and technical abilities.

This summer 2020, three students, **Isha Gautam, Jap Leen Kaur Jolly and Ria Arora**, interned at Google as Software Engineering Interns. We're glad to share that Japleen Kaur Jolly has also received an offer to join Google as a full-time Software Engineer in 2021. She is the Director at Women Who Code Delhi and an evangelist at Delhi Women in Machine Learning and Data Science. She was also a part of the winning team for Smart India Hackathon 2019 and was also a Facebook F8 scholar.

Two girls from the University, **Karishma Singh Chauhan and Ananya Jain**, bagged a STEP internship 2020 offer from Google. We're excited to share that both of them have now been offered a return internship for 2021 as Software Engineering Interns. Apart from them, two students, Sanchi Bisht and Sara Anwer, got direct on-campus Software Engineering Internship offers for 2021 from Google.

Placements at a Glance (2019-2020)

Name of the Company	Full Time Offers	CTC (Full Time)	Internship Offers	Total no of Offers
Microsoft IDC	8	43,00,000	15	23
Goldman Sachs	12	23,00,000	13	25
Uber	2	34, 68000	1	3
Salesforce	3	31,80000	3	6
Google	2	30,00000	2	4
LinkedIn	1	20,90000	3	4
Intuit	4	25,16000	3	7
Walmart	16	18,50000	11	27
Flipkart	5	23,84000	4	9
Adobe	3	43,17000	8	11
Kronos	5	15,35000	0	5
Deutsche Bank	4	14,30000	6	10
Morgan Stanley	0	-	3	3
GoIbibo	6	18, 00000	0	6
Sap Labs	7	20,60000	8	15
Sandisk	7	18,00000	8	15
American Express	7	13,27000	5	12
Accenture	26	6,50000	0	26
Cisco	14	29,00000	14	28
VISA	1	15,39000	0	1
Baxter	5	10,00000	0	5
Expedia	6	12,83000	5	11
Eaton	2	6,25000	2	4
CVent	1	15,10000	0	1
Philips	10	7,50000	0	10
InfoEdge	5	12,50000	0	5
Media.Net	0	30,00000	1	1
NetApp	3	18,00000	5	8
Ion	1	12,00000	0	1

Ather Energy	1	7,00000	0	1
Oracle	14	9,00000	0	14
Dell	20	8,00000	0	20
Cyber Group	3	4,50000	3	6
ThoughtWorks	3	8,00000	0	3
_	1	13,00000	1	2
Wheelseye				
Citrix	1	24,50000	4	5
Tata Motors	4	7,00000	0	4
ThoughFocus	5	5,50000	5	10
MG Motors	1	6,00000	0	1
Sapient	3	5,00000	0	3
Altran	2	4,50000(M. Tech), 3,50000(MCA)	2	4
Libsys	1	5,00000	0	1
Fractal Analysis	3	10,50000	0	3
IBM	11	7,25000/7,85000	0	11
Macquarie	4	11,00000	0	4
Harman	1	9,00000	0	1
EagleView	0	11,00000	0	0
Samsung	2	12,00000	0	2
Grofers	3	16,00000	0	3
Optum	8	7,15000	10	18
McKinley and Rice	0	6,50000	0	0
Sheroes	1	9,00000	2	3
Newgen	0	4,25000	0	0
ToTheNew	1	4,50000	1	2
Ericson	14	5,75000	0	14
Orange	3	8,50000	0	3
Synopsis	2	13,00000	0	2
Myntra	0	-	8	8
Mobiquel	0	-	2	2
Craterzone	2	3,60000	1	3

Yamaha	1	6,00000	1	2
Nagarro	0	4,00000	0	0
Mobikwik	4	8,50000	0	4
Comviva	3	6,63000	0	3
Elucidata	1	7,00000	1	2
NIIT	4	3,50000	0	4
PwC	6	5,86000	0	6
MyKaarma	0	29,00000	0	0
Amazon AWS	2	19,00000	0	2
Amazon SDE	0	30,25000	7	7
TCS Ninja	10	3,50000	0	10
TCS Digital	4	7,30000	0	4
Qualcomm	0	-	1	1
Jaro	0	12,00000	0	0
Infosys	2	3,75000	0	2
Mahindra &	1	6,50000	0	1
Mahindra				
NxP	1	14,00000	0	1
ZS Associate	1	12,00000	0	1
ARM	0	-	4	4

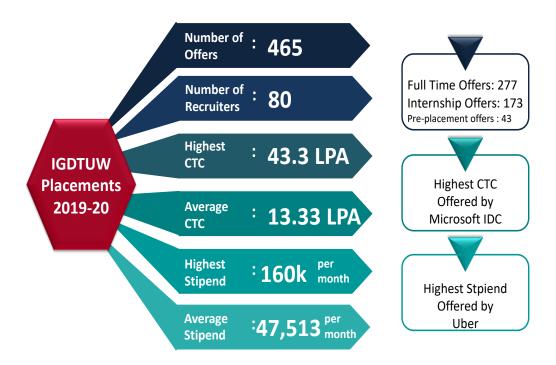
Highest CTC and Stipend Offered



Year-wise Highest CTC Comparison



Year-wise Highest Stipend for



In addition to spectacular placement for its students, IGDTUW actively promotes research collaborations for both students and faculty members at the Undergraduate as well as Post-Graduate level by providing the best resources and modern facilities. Delivering quality education along with hands-on learning experience, which helps in the development of technically sound, trained, industry-ready manpower, has been one of our primary goals, and our placement records reflect on the success of our initiatives. The overall placement for the Undergraduate Engineering students across various technical and non-technical industries, including some of the very high-end ones, has been very impressive.

Having received distinguished opportunities for Higher Studies in renowned Universities of the world and presentation of research papers in International Conferences like IEEE UK, our alumni have left no stone unturned to make a spot for IGDTUW on the global map.

PLACEMENTS HIGHLIGHTS

Mechanical & Automation Engineering

Placements of the students of Mechanical and Automation Engineering (MAE) Department in the University are immensely encouraging. Every year, the placement and Internship offers are increasing constantly. The Department of Mechanical and Automation Engineering of the University is well associated with reputed companies like Exxon Mobil, Maruti Suzuki, Honda Cars, Bajaj Automobile, MG Motor, Technip FMC, Baxter, Tata Motors, Saint Gobain, Nestle, Eaton, HUL, Ather Energy, Siemens, Honeywell, Cameron, McDermott, Fluor Daniel. ISGEC, NBC Bearing and many more.

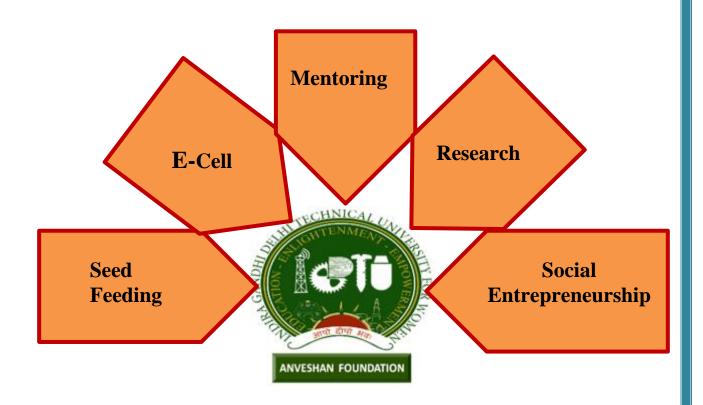
In spite of pandemic hitting the industries with full force, the placement session of 2020 has been successful on full-swing. The companies that have visited so far or are still in process are Amazon, Bajaj, Volvo, Eaton, ISGEC Heavy engineering LTD, MG Motors, GE, Technip FMC, Beckon Dickinson, Hindustan Unilever Ltd, ZS, Accenture, Anand-Spicer India, Flipkart, Collegedunia, Wabtec, Gabriel India, Medtronics, LAM research, Capgemini, DXC Technologies.

The highest package offered so far has been 13.43 LPA CTC for Full Time and 60,000 per month for 6-monthsInternship. Till now 17 students have been placed in Full Time and 26 students have been placed in 6 months Internship.

COMPANY NAME	NO. OF STUDENTS PLACED	PACKAGE OFFERED (per annum)
*Amazon	13	60,000 pm
Bajaj	4	9,08,000
MG Motors	2	6,00000
*General electronics	1	20,000 pm
Hindustan Unilever Limited	2	7,00000
ZS	5	13,43000
*Anand-Spicer India	2	10,000 pm
Collegedunia	4	9,00000
*Wabtec	4	30,000 pm
*Medtronics	1	20,000 pm
*Veolia	2	20,000 pm
*Gabrielle India	3	10,000 pm

Note :- [*] Internship Offers





A Business Incubation Centre of IGDTUW

Indira Gandhi Delhi Technical University for Women has promoted and incorporated a separate Section 8 Company under the company's act 2013 to propagate Entrepreneurial Culture and Ecosystem among Women. IGDTUW-Anveshan Foundation was incorporated on 13th October 2016 and is funded by Directorate of Training and Technical Education (DTTE), Government of NCT of Delhi. It is also recognized by Department of Science and Technology (DST), Government of India as **Technical Business Incubator (TBI)**.

Dr. Amita Dev, Honourable Vice Chancellor IGDTUW is the 'Chairperson' of IGDTUW Anveshan Foundation. Prof. Arun Sharma, HoD, IT is the Managing Director of Anveshan Foundation. There are senior Professors of IGDTUW serving as Directors for providing mentorship to the start-up's Women aspirants. Dr. V K Arora has been working as the Chief Executive Officer (CEO) of the company since its inception.

The Incubation centre is facilitated with four ventures of development cycle: -

In Pre-incubation, activities related to Motivation, Ideation, Innovation, MVP, PoC, PoV, Feasibility, Prior Art, Intellectual Property Right, Pitching Deck, Business Plan and Presentation skills are provided to the participants by the Incubation Center. There are total thirty student members in the E-Cell. In the last two years many activities and events have been organized by the E-Cell which include Workshops, Boot-camps, Hackathons, Industrial visits, Inter college-university competitions, Management Development Programs. CISCO has established complete IoT and robotics Lab 'thingQbator' for Innovation through its CSR funds in the year 2018. More than fifty projects in three cohorts have been completed under this initiative.

Total twelve companies are working as start-up Incubatees, all comprising of Women enterprises with IGDTUW Anveshan Foundation. The Incubation Centre is equipped with fully furnished air-conditioned office space, complete ICT and free consultancies in technical, business and strategic front to all it's Incubatees, also providing support in Marketing, Regular Product Development, Supply Chain, franchise models and bargaining with Investors. In the Post-Incubation phase, hand holding support continues from Anveshan Foundation in Consultancy, Laboratories & Innovation support and Portfolio Management.

Activities/Events/Collaborations/MoUs: -

- a) Anveshan Foundation has incubated a total of 12 ncubateeswith seed funding of total INR 32.5 lakhs till date.
- b) Anveshan Foundation has collaborated through MoU/ Contract with NASSCOM Foundation, GiZ (German organization) for Strengthening Incubation & Start-up Ecosystem for Women Entrepreneurs under Pre-Incubation activities.
- c) Organized two days Hackathon (as Inter college university Business Plan Competition) in three consecutive years where tremendous response was received from different colleges of Delhi NCR.

- d) In the year 2020 Anveshan has conducted twelve mentorship sessions, two boot camps, two business idea/ demo-day events, one CEO Meet and two training programs.
- e) A unique three months online course on 'Innovation & Entrepreneurship' was launched in the month of September 2020. More than 100 participants have registered for this course.
- f) Our Incubatees' success stories have been covered in Primetime of DD, ZEE, Harvest Channels and leading newspapers.
- g) Our two Incubatees' ETI Labs Private Limited and Nature Fabtech Private Limited has crossed turnover of INR 20 Lakhs individually.
- h) Manasi, director of ETI Labs received Gandhiyan Young Technology Innovation (GYTI) award by Dr. Harsh Vardhan in July 2019.
- i) Ms. Dipti Chourasia was selected in Aspiring Women Entrepreneurship and got two weeks training in Austin Texas.
- j) SteamEdu Learning is continuously conducting training programs in all the domains of STEAM pan India including areas like Leh Ladakh. Promoters of the company had got appreciation from DRDO Leh – Dihar (Defence Institute of High Altitude Research) for Social Work among women/girls.
- k) Nature Fabtech got two export order from USA in the month of November 2019 for bamboo fabric made infants clothing.
- 1) Provotex Resources designed more than 20 patterns of its own jute bags for various purposes.

Note: Any Woman Entrepreneur/ Women Enterprise looking for pre-incubation, incubation or acceleration support for her start-up or business venture may apply online through web portal http://www.anveshanfoundation.org or email at ceoincubation@igdtuw.ac.in





National and International Collaboration with Academia and Industry

In the last couple of years IGDTUW has given a special impetus on building research facilities augmented by funding from various National and International funding agencies. Many new labs have been added in various departments during this year. Resources have been generated by the faculty through sponsored research projects which have added value to their Research and Technology.

The University has been actively involved in collaborative programmes with National and International Organizations/Universities to remain at the forefront in Scientific and Technological research and development and to share the knowledge for mutual benefits on various socio-economic issues.

IGDTUW is currently partnering with several Universities to promote various forms of Academic Collaborations with institutions as well as Industry for improvement in performance of the students, knowledge updating of faculty, bridging gaps between academia &industry, better placements and higher studies opportunities for students. Few of our prestigious collaborations worth mentioning are:

- (i) Department of Science and Technology has selected IGDTUW for building Centre of Excellence in Artificial Intelligence.
- (ii) Collaboration with United Kingdom Research and Innovation, Centre of Ecology & Hydrology, CEH, UK
- (iii) NASSCOM & CISCO for setting-up of thing Qbator Innovation lab
- (iv) M/s. Flour Daniel for setting-up of Turning Lab under CSR activities
- (v) National Ping Tung University [NPTU], Taiwan for research collaboration, student and Faculty Exchange etc.
- (vi) Maykop State Technological University, Russia for collaborative research, exchange of faculty, students, researchers etc and jointly organizing Symposia, Seminars and Conferences.
- (vii) Cyber Peace Foundation for setting up of Centre of Excellence in Cyber Security.
- (viii) EATON Foundation for Internship placement and Scholarships to the students etc.
- (ix) MoU with Deutsche Gesellschaft fuir Internationale Zusammenabert (GIZ)
- (x) MoU with IBM India Private Ltd. for Academic Growth and Technological Advancement

- (xi) MoU signed with 'Fair Conditioning' for designing the course curriculum of B.Arch. program by inclusion of pedagogy, tools and techniques of energy efficiency and Passive active cooling techniques.
- (xii) Women in Big Data[™] (WiBD) is a global not-for-profit global organization out to champion the success of Women in Big Data and to increase women's representation in Big Data launched in association with IGDTUW
- (xiii) MoU with Amazon signed by Department of Information Technology
- (xiv) MoU with Enobble IP for facilitating activities pertaining to intellectual property to staff and students and Incubatees.

Collaboration with Delhi Govt. Departments

- Delhi Subordinate State Selection Board (DSSSB)
- ❖ MoU with Municipal Corporation of Delhi (MCD)
- ❖ Training of Delhi Police Staff on Cyber Security & Cyber Crime





Research and Development Activities at a glance

The University has been on the mission to promote high quality scientific research in the frontier areas of **Engineering, Science and Humanities.** Research is of utmost importance for both the Economic and Social development of a nation. The cognitive and pragmatic approach of the female gender; blended with sensitivity; to the needs of our society helps in building the knowledge economy of our country. Indira Gandhi Delhi Technical University for Women (IGDTUW) has evolved to become a national flagship, research-led University with a mission to foster an environment for excellence in professional education and ensure active participation of women in the field of Engineering, Science, Management and Technology, thereby attempting to strike out a fine balance between world of work and life. The University vows to devise sustainable systems and state of-the-art infrastructure to enable the Indian women to dawn the role of future leaders, managers, researchers and productive team players in the field of Science &Technology. Faculty members are encouraged to submit proposals for sponsored research and undertake research-based consultancies.

Sponsored Research Projects of various departments in IGDTUW in the recent past are as follows:

(i) MOES, India and NERC, UK Collaborative Research Project

This project is under Indo-UK partnership to facilitate cooperation between the UK and Indian Earth System Science and Environmental Research Communities. Project is a part of Ministry of Earth Sciences (MOES) and Natural Environment Research Council of the UK (NERC) Implementation agreement on Atmospheric Pollution and Human Health in an Indian Megacity (APHH). IGDTUW is an official Collaborator in the project with University of York, University of Manchester, University of Lancaster, University of Birmingham and Centre of Ecology and Hydrology, U.K. in the project and equipment's of worth Rs.30 crores were installed at IGDTUW to carry out research.

(ii) CURIE Grant for IGDTUW

CURIE (Consolidation of University Research for Innovation and Excellence in Women Universities) grant is to develop state-of the-art infrastructure in women universities in order to attract, train and retain promising girl students in STEM domain. The funding agency Department of Science and Technology sanctioned a total fund of **3.63 Crores** for the duration of 3 years starting from 2018 to IGDTUW.

(iii) Project Grants from Department of Science and Technology (DST)

- Fabrication and Application of Polymeric Nanoshots as Drug Delivery Agent for Cancer Imaging and Therapy- Dr. Bhavani Prasad Naik Nenavathu as Principal Investigator from March 2017 till March 2020 with a funding of 26 Lakhs.
- ii) *Vigyan Jyoti Pilot Project* Dr. Jasdeep Kaur Dhanoa as Principal Investigator from 2018 onwards with a funding of **20 Lakhs p**er year till 2019
- Design and Development of Customized Temporo Mandibular Joint Prosthesis for Patient suffering from End Stage TM disorders- Ms. Mehak Sharma under the mentorship of Dr. Manoj Soni in the year 2018 for three years with a funding of 21.50 Lakhs.
- iv) Detection of cause of Life-Threatening Diseases by Examining the Human Genome in Microarray Data using Distributed Implementation of Algorithms-Prof.

 Devendra Kumar Tayal as PI from ICPS Division, DST, Ministry of Science & Technology with a funding of 40 Lakhs funded for the year 2019-2021
- v) *Chips to System Design* (SMDP-C2SD)- Department of ECE working with IIT Delhi as Resource Centre for the year 2014-19 worth of **1 crore** by Department of Electronics and IT, Ministry of IT, Govt. Of India.
- Vi) Information Security Education and Awareness (ISEA) project Phase-II by Deity, Govt. of India and state of the art research labs have been established under the project grant: i.e. Cyber Forensics Lab under Department of IT (with a project grant of 65.3 lakhs) which is equipped with FRED Server and Net Force Suite —a forensic suite developed by C-DAC and IoT Lab which has been equipped with real time test bed "Sense Nuts: IoT Platform for Excellence" for experimenting sensor for IoT applications.
- vii) *My Smart Phone (Mobile Education Kit-3)* under the Department of CSE, IGDTUW received a grant of **23.40** lakhs from Microsoft Corporation USA.
- viii) Grant of **90 Lakhs has been received from MHRD** for establishing **Design and innovation Center at IGDTUW** along with **60.15 Lakhs** to Dept of CSE for collaborative research with IIT Delhi, IIIT Delhi, NITTTR Chandigarh etc.



Research Publications

The faculty and students of our University have published over 120+ research papers, including Journal papers, Conference papers and Book chapters in the past one year. Our faculty members are frequently invited to National and International Seminars and Conferences as experts &Keynote speakers. Many research papers have been published in very high impact factor journals and have won recognition in National and International research paper competitions. Some notable mentions are as follows:

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- 6. Amita Jain, Sudesh Yadav, Sonakshi Vij, Yogesh Kumar, **Devendra Kumar Tayal** "A Novel Self-Organizing Approach to Automatic Traffic Light Management
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- 16. Sanjay Motia, **SRN Reddy**, "ICT Driven Decision Support & Information Dissemination (DSID): A Comprehensive Technical Appraisal of DSID Systems in Indian Agriculture", International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-9 Issue-5, March 2020
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National and International Conferences

(i) International Conference- ASMET-2020

Department of Applied Sciences & Dept. of Management organized first International Conference on "Advances in Smart Materials & Emerging Technologies" at IGDTUW, Delhi on 23rd-24th January 2020. Ambassador Tien Chung-kwang, Representative of Taipei Economic and Cultural Centre in India, was the Guest of Honour in the Conference. Secretary DST, Ashutosh Sharma was Chief Guest for the conference.

(ii) International Conference - AIST-2020

International Conference on Artificial Intelligence and Speech Technology (AIST2020) was organized by the Department of Information Technology in technical association with IBM from 19-20th November, 2020 in an online mode. The event was inaugurated by Prof. V Ramgopal Rao, Director, IIT Delhi. A number of Keynote Addresses were delivered by eminent Speakers from India and abroad including Prof S Nakamura from NAIST, Japan, Prof Nemeth Geza from Budapest University of Technology and Economics, Hungary, Prof. Milan Stehlik from Johannes Kepler University, Austria, Prof Umesh S from IIT Madras, Dr. Win Pa Pa, UCSY, Myanmar, Dr. Manish Bhide from IBM and several others.

(iii) National Conference –Innovations in Mechanical and Automation Engineering

National conference on Innovations in Mechanical and Automation Engineering was organized on 18th Sept., 2020. Hon'ble Atul Sobti Director General of scope was the Chief Guest and plenary session was conducted by Guest of Honor Prof. Dtmitru Nedelcu from Romania.

Workshops & Seminars

Workshop, Seminars/Webinars, Faculty Development Programmes

During this unforeseen time of COVID 19 time, IGDTUW has been able to organize various Webinars, Faculty Development Programme, Workshops and Seminars making full utilization of online platforms and reaching to the students and researchers across the world. Some of notable events are under mentioned:

- ➤ Summer Internship on "Building Intelligent Applications" in collaboration with IBM from 15th June to 31st July, 2020.
- ➤ Summer Internship on "Data Science and Machine Learning" under ACM Students Chapterfrom15th June to 31st July, 2020.
- Summer School on "Design Thinking" under CISCO thingQbatorfrom 15th June to 31st July, 2020.
- ➤ International Workshop on "Artificial Intelligence and Speech Technology (AIST)" from 17th-21st August, 2020.
- ➤ ATAL AICTE sponsored Faculty Development Programme (FDP) on "Deep Learning and Artificial Intelligence" from 21st-25th September 2020.
- ➤ Workshop on "Data Science- Research issues and Applications" organized by Department of CSE from 10th Jan to 11th Jan, 2020.
- ➤ Webinaron "IoT and its Practical Applications 2020" in association with DIC-MHRD organized by Department of CSE. from 24th-25th July 2020.
- Faculty Development Programme (FDP) on "Deep Learning Algorithms for Medical Image Processing" organized by Department of ECE from 20th -24th Jan 2020.
- ➤ Workshop on "Solid Works and Ansys" organized by Deaprtment of MAE on 22 January 2020.
- ➤ Eco Niwas Samhita workshop was organized in collaboration with **Price Water House Cooper** by Department of Architecture and Planning, on 24th July 2020.
- ➤ "Master class on Self Compassion the Transformative Power of Being Kind" was organized by Department of ASH on 26th June, 2020
- ➤ Competition "Gandhi Young Innovative Idea-2020" was organized by Anveshan Foundation on 2nd Oct. 2020.

IGDTUW- Faculty Accomplishments

➤ Dr. Jasdeep Kaur Dhanoa was selected for the prestigious International Visitor Leadership Program (IVLP-2019), sponsored by the United States Federal Department, Bureau of Educational and Cultural Affairs from October 7-25, 2019. The title of the Project was Advancing Women in STEAM Fields. She visited Washington DC, Seattle, Akon-Ohio, Boston, New Orleans.



- ➤ Dr. Preeti Vajpeyi was welcomed in "Mega Hall of Fame' by Civil Society Magazine", a renowned magazine focusing on the initiatives taken by individuals and NGO for larger societal good on September, 2019. She was awarded for her work with NGO Vinyas Society in field of Education.
- ➤ Dr. Preeti Vajpeyi was awarded "Anant Gunwant Samman" by Kalachaya, Pune for lifetime contribution to education in January 2020
- ➤ Dr. Preeti Vajpeyi, was invited to train IAS officers at LBSNAA, Mussorrie, in Design and Development of Social Infrastructure like schools and Aaganwadis in 2019 and 2020.
- ➤ Ar. Preeti Chauhan was invited for a cover story editorial in an Interiors and Decor Magazine's Feb-Mar' 2020 issue under Cover Story "The Women Who Are Making A Difference!!"

IGDTUW- Student's Triumph

- ➤ Alumnus Ms. Navneet Mann secured 33rd rank in UPSC civil services exam held in 2019.
- ➤ Harshita Kalsi, student of ECE batch 2020 received prestigious "Richard E. Merwin Student Scholarship" for spring 2019 comprising of \$1000 cash grant.
- ➤ Manibha Sharma, student of ECE bagged the first position and awarded cash prize of Rs.50,000/-. in the VLSI Design Contest as a part of 32nd International Conference on VLSI Design and 19thInternational Conference on Embedded Design.
- ➤ Team Shakti of MAE Department brought laurels for the University in "Bike Competition" held at O.P.Jindal University, Raigarh, Chhattisgarh from 13th to 16th January2020.
- ➤ Sheryl Gupta, student of B.Tech. ECE was invited to attend Harvard Asian Project for international relations, Asia conference, Kazakhstan. She was among 300 delegates who were selected across the world.
- ➤ Ms. Pooja, student of M.Tech. ISM was invited to attend "7th HEIDELBERG LAUREATE FORUM Event in Germany" organized by ACM. She was among 200 students who were selected across the world for attending the event.
- Shambhavi Chaturvedi, student of 3rd Year MAE, won "Eaton Pratibha Scholarship Award" that aims to recognize exceptional women engineering students with a cash prize of INR 56,000.
- ➤ Shreya Dhawan won National Mech-Aura 2019-20 competition and received a cash price of One Lakh organized by Collins Aerospace in January, 2020.
- ➤ Vaishali and Katya Sah, students of 3rd year MAE department bagged the "Kalpana Chawla Scholarship" for the year 2019- 2020 by SAEINDIA Foundation.
- ➤ Khushbu and Muskan Verma, students of B. Tech ECE, were awarded for presenting a lightest weight vehicle in dynamic round of E-Bike Racing Challenge 2020.
- ➤ OSA Student Chapter (International Chapter) received the "Diversity and Inclusion Grant-2020" of \$2000 on "International Women Day in Science" 11th Jan., 2020.
- ➤ Monika Kumari, M. Tech Student of Department of Information Technology, IGDTUW, became the first woman in India to get the Financial Services Information Sharing Analysis Centre (FS-ISAC) Cyber Security Scholarship worth USD 10,000.

IGDTUW- Centre of Excellence

In order to foster a culture of research and innovation, IGDTUW is setting up following Centre of Excellence (CoE).

➤ Centre of Excellence in Mechatronics with funding of Rs. 8 Crores from Delhi Knowledge Development Fund [DKDF], Government. of Delhi.



➤ Centre of Excellence in Artificial Intelligence with funding of Rs. 8.5 Crores from Department of Science & Technology (DST), Government of India.



Glimpse of Cultural and Technical events at IGDTUW

IGDTUW is committed to make the students' educational experience multifaceted and holistic. This commitment is very evident with providing ample cultural events round the year, holding sports meets, encouraging and facilitating student's participation in National and International level competitions.

(I) TAARANGANA 2020

TAARANGANA provides a platform to all students to showcase their talents in various cultural art forms. It includes events like Anhad, Aaghaz, Knights of the Fall, Lilac Dreams, Campus Princess, Mr. and Ms. Taarangana, Rangmanch, Pop Art, Synnove, Moodle Doodle, Urban Thump, Pitch perfect and many more

The highlight of Taarangana'20 was the pro night with the singing sensation, Darshan Raval, DJ Moctave ,stand-up comedians, Sahil Shah and Rahul Dua, followed by an energetic and enigmatic Vanmoon by VH1 SuperSonic



The theme for Taarangana'2020 was "Minerva: A Talent Tapestry"

The objective of the fest was to provide a platform to all students to showcase their talents in various cultural art forms. The two days of excitement beginning from the inaugural on 30th evening continued on 31st January and 1st February, 2020. Taarangana saw a tremendous footfall, incredible participation, and an exciting response from students all across Delhi NCR. Among the plethora of successful events were Antraa, Anhad, Aaghaz, Knights of the Fall, Lilac Dreams, Campus Princess, Mr. and Ms. Taarangana, Rangmanch, Pop Art, Synnove, Moodle Doodle, Urban Thump, pitch perfect and many more events which attracted more than 20000 students in the span of two days.

(ii) <u>INNERVE 2020</u>

Innerve in IGDTUW was incepted in 2015. It witnesses two-day extravaganza with huge gathering of students from various universities and colleges to participate in the plethora of technical events.



Innerve, the Annual Technical Festival of IGDTUW, is a true mixture of Technology, Inspiration, and Innovation. During the ongoing COVID-19 pandemic, Innerve'20 went online. Innerve'20 had over 35 events, workshops, hackathons, and over 5000 registrations from all over India. Innerve prides itself for being inclusive. For beginners, Innerve'20 introduced many workshops. Innerve collaborates with prominent sponsors to incorporate cutting edge technologies into the program. Among other highlights, the Learn with Innerve initiative offered multiple webinars about latest technologies, competitive exams, career, and more. A Social Campaign "Cyber SeekCure" emphasizing the importance of following the netiquette and ensuring virtual safety was also conducted during Innerve'20.

The theme of Innerve'20 was "Error 404:Tech Not Found", to celebrate the technologies that never saw the light of the day, ideas that never came to fruition. Innerve'20 had a whole treasure trove of fun and learning events of various categories. There were mesmerizing participation/events form all the departments of IGDTUW.All in all, this two-day festival of technology becamea big success loaded with fun and tech that went off and created unforgettable memories and indelible imprints for all who were a part of it.

(iii) SPIC MACAY

The IGDTUW SPIC MACAY Chapter is an extension of the philosophy of the SPICMACAY's intention to enrich the quality of formal education by increasing awareness

about different aspects of Indian heritage and inspire the young minds to imbibe the values embedded in it.

The SPIC MACAY chapter of IGDTUW organized a miraculous Hindustani Classical Vocal Music recital by one of the most renowned Vocalists of all times -Smt Sunanda Sharma, a disciple of the legendary Padma Shree awardee vocalist of Benaras Gharana VidushiDr.Girija Devi, on 3rd Nov 2020. She was accompanied by Shri Krishan Kumar on Tabla and Shri Bulle Shah on Harmonium on the stage. Sunanda Ji commenced the mesmerizing event with her first music piece, which was an offering to her Gurus and the Almighty. She then spoke about various repertoires like Thumri, Thappa, Chaitis, and Dadra following which, she graced the event with beautiful compositions like 'JaaJaa Re ApneMandirwa', 'Teri AnkhiyaRaseeli' and some folk songs of Punjab, Haryana, and Himachal Pradesh.

But this not the only enthralling part of the evening, what added to the charm of her voice was her insightful notions on the importance of "Desire to Learn" and "Consistent Practice" as the mantra to master any art form.

(iv) <u>IGNITE – Annual Sport Meet</u>

In 2019, IGNITE kicked off with its first sports day at IGDTUW with an enthusiastic zeal and energy. It is a huge event in which the University organized various inter-college sports competitions, such as basketball, volleyball, badminton, table tennis, 4x100 relay, 4x400 relay and 100mt-400mt races



IGNITE-2020 was held at JLN Stadium on 16-17 February 2020. SAI affiliated referees were invited to conduct and evaluated the sports event. About 400 students from various colleges participated in the sports meet.

(v) UNNAT BHARAT ABHIYAN (UBA-Cell)



UNNAT BHARAT ABHIYAN (UBA)- CELL, IGDTUW is a platform for transformational change in village development. It aims to work with the people of village in identifying development challenges through survey and evolving appropriate solutions for accelerating sustainable growth. UBA -Cell have been very active throughout the year and have adopted 5 villages under the initiative.

GLIMPSE OF ACTIVITIES UNDER UBA

- 1. The UBA Cell, IGDTUW team attended a two-day national workshop, under UBA, on 21st and 22nd January, 2020, organized by UGC, on fostering social responsibility and Community engagement in Higher Education Institution in India held at ISID, Vasant Kunj, New Delhi.
- 2. A painting competition was held at the local govt. girls' senior secondary school on the theme of Save water on 6th March 2020 with around 200 participants in the event. This painting competition aimed at spreading awareness about UBA and building a bridge between the locals of the adopted village and the UBA cell of the University.
- **3.** An awareness session was conducted on "Precautions in COVID-19 outreach" with the release of a video and a poster to explain the disposal of masks on 14th April 2020 with total of 500 participants making the event a huge success
- 4. An awareness session was conducted on "Precautions in COVID-19 outreach" with the video release to explain the various ways to boost immunity against COVID-19. on 3rd June 2020 with total of 400 participants making the event a huge success

SOCIETIES & CLUBS

One of the best things about University/College life, undoubtedly, is getting to explore things other than academics. University societies are one such platform which help students to engage in different activities and help them to further hone their skills through vigorous participation in various creative fields of their interest.

There are innumerable societies present in IGDTUW which provides a holistic environment for girl students to engage and participate in the activities of their interest. IGDTUW believes that these societies bring in a platform for Women power and Women empowerment among its girl Students and enhance their personal growth with exemplary work apart from just academic achievements.

By being a member of any society, IGDTUW Students are expected to attend meetings, take part in discussions with other members, suggest ways on how to improve work quality, etc. They also bear the responsibility to organise various events and fests throughout the year. Society members also visit other Universities/colleges and participate in the competitions being held there to represent their respective colleges at different levels. Moreover, societies also help to provide good exposure to the students as they are associated with various other reputed organisations and individuals, who can guide them efficiently.

Apart from this, students who are not members of a society can also bring out their creativity and showcase their talent in the various competitions, fests and events organised by a society in the University premises.

Overall, the University society experience is fun as students form new friendships, get to meet like-minded people, and most importantly enjoy being part of something that helps them to learn practical things from outside the books as well as enhance their CV.

(i) IGDTUW Management Societies/Clubs

- HUUMANOID (The HR Society)
- ZOSH (Marketing Society)
- MUDRA (The Finance and Investment society), Department of Management
- SAMANVAY (Economics and Research society)

- VARTTA (Business New society)
- The Fine You (Mental & Physical Health Club)

(ii) IGDTUW- Cultural Societies/Clubs

- Synergy Sports Club
- Greensphere Society
- RAHNUMA- Dramatics Society
- B.H.A.V (Behold an Architect's View)- The Role Play Society of IGDTUW
- Zena- Fashion Society
- Hypnotics-Western Dance Society
- ANTARGAT Creative society
- ROTARACT Club
- INSTINCT
- Techno Literate
- TARANNUM-Music Society
- OSA Student Chapter- The Optical Society

(iii) IGDTUW- Technical Societies/Clubs

- ACM Student Chapter
- Robolution
- LEAN IN
- CSI Student branch
- IEEE Student Chapter
- ENACTUS
- American Society of Mechanical Engineers (ASME) Chapter
- AI Club- Artificial Intelligence Hub

3rd Convocation 2020



This convocation ceremony is a day of celebration of dreams, desires and accomplishments for all the graduating students. All medallists deserve a special mention here as they bring pride and glory to the University. IGDTUW is pleased to inform that the total number of degrees to be awarded in Convocation 2020are 485in Undergraduate, Post Graduate and Doctorate programmes.

Graduated in 2020

S.No	Enrolment No	Course	Batch	Name	CPI
Chancellor Gold Medal Recipient					
1.	13901012016	B.TECH(CSE)	2016-2020	ANKITA RAI	90.27
2.	00302082018	M.TECH(R&A)	2018-2020	AMANDEEP KAUR	87.70
Vice-Chancellor Gold Medal Recipient					
1.	13901012016	B.TECH(CSE)	2016-2020	ANKITA RAI	90.27
2.	01901042016	B.TECH(MAE)	2016-2020	HARSHA CHAUBEY	86.31
3.	01001022016	B.TECH(ECE)	2016-2020	NAZISH ISLAM	88.69
4.	04501032016	B.TECH(IT)	2016-2020	APOORVA DHAWAN	88.11
5.	00206142015	B. ARCH	2015-2020	PRIYA SINGHAL	78.98
6.	03404092017	MCA	2017-2020	RISHIKA BHATIA	86.99
7.	01302052018	M.TECH(ISM)	2018-2020	PRERNA GOEL	86.91
8.	01502072018	M.TECH(VLSI)	2018-2020	NEETIKA	81.48
9.	00402062018	M.TECH(MPC)	2018-2020	KAVITA SHARMA	84.46
10.	00302082018	M.TECH(R &A)	2018-2020	AMANDEEP KAUR	87.7
11.	01303152017	M.TECH(ICT)(PT)	2017-2020	KHYATI KAPOOR	87.29
Exemplary Performance Silver Plaque Recipient					
1.	13901012016	B.TECH(CSE)	2016-2020	ANKITA RAI	90.27



Indira Gandhi Delhi Technical University for Women

(Established by Govt. of Delhi vide Act 09 of 2012) Kashmere Gate, Delhi-110006 <u>www.igdtuw.ac.in</u>