

# BITS & BYTES



The Annual Newsletter  
**INDIRA GANDHI DELHI TECHNICAL  
UNIVERSITY FOR WOMEN**

1st Issue

May 2015

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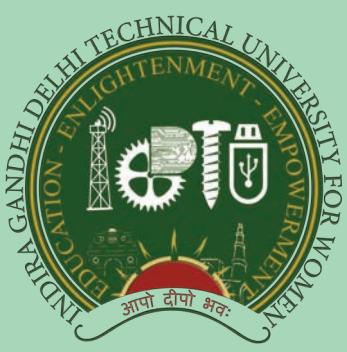
Malvika Gupta (ECE 3rd Year)

Aparna Kansal (ECE 3rd Year)

Kritika Khurana (ECE 3rd Year)



Left to Right: Mr. Rishabh Kaushal, Mr. Akash Tayal, Mr. Dhanjay Yadav, Ms. Deepti Chabba, Dr. Kalpana Yadav, Dr. Bhavya Raj, Ms. Smita Kapur, Ms. Aparna Kansal, Ms. Kritika Khurana and Ms. Malvika Gupta



# Bits and Bytes

NEWSLETTER

MAY 2015

## Also in this Issue!

### MAJOR EVENTS IN THE CAMPUS

From Taarangana to the quadruple technical fests, sneaking a look into how the IGDTUW campus remains abuzz with plenitude of activities.

### NEW APPOINTMENTS

Introducing the new members of the IGDTUW fraternity

### FACULTY ACCOMPLISHMENTS

An overview of achievements by the members of the faculty

Page 10

### STUDENTS' TRIMUPH

An insight into the colossal activities IGDTUW students triumph in, besides the routine academics.

Page 22

### CAMPUS PLACEMENTS

When technology giants like Microsoft, Oracle, Honeywell and many more visit the campus, it is bound to cause a stir.

Page 50

## THE EDITORIAL NOTE



Any responsibility whether big or small is a huge responsibility, especially when it is being given for the first time. The desire for successful completion of the given task and delivery of expected results is a constant source of motivation and also an efficiency enhancer. When this assignment came to us it appeared to be a huge challenge but as the work began and gradually progressed it became a highly fun filled and joyful activity.

Fun filled because working in a team always is, especially when you are working with people like Mr. Akash Tayal, Mr. Rishabh Kaushal, Ms. Smita Kapur, Ms. Deepti Chabba and Mr. Dhanjay Yadav who are all special in their own ways. Last but not the least the student editors Malvika Gupta, Aparna Kansal and Kritika Khurana deserve a special mention as they were the ones who lost their sleeps and sacrificed their joys the most to bring this newsletter to its present form. The experience became joyful and memorable, because it gave us many moments of pride and fulfilment. As information regarding student's achievements reached us one by one, department by department the feeling of joy and pride increased manifolds. Such tender minds and such commendable and creditable accomplishments!

We proudly present before you the triumphs of the youngest members of the IGDTUW family along with laurels brought to the University by our esteemed colleagues in the form of research publications, projects, patents filed etc in this edition of the Newsletter. This issue also throws light on all the activities conducted throughout the year under the aegis of different clubs, societies, cultural and technical fests. The readers would find it not only informative and interesting but encouraging and inspiring too.

We once again sincerely thank the editorial team for their diligent efforts in bringing out this issue. This endeavour would not have been able to see the light of day without the mentorship and constant guidance of our dear Vice Chancellor, Prof. Nupur Prakash. We wish you the very best from our side and hope that you will enjoy reading this issue of our University Newsletter.

Dr. Bhavya Raj

Chief Editor

Dr. Kalpana Yadav

Faculty Advisor



## MESSAGE BY THE REGISTRAR

Indira Gandhi Delhi Technical University for Women has contributed successfully in developing well groomed female technocrats, since its inception.

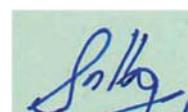
It is a matter of great pride for the IGDTUW family that we have been able to balance growth and expansion while making quality of education.

The teaching learning processes at the University are a blend of modern technologies with contemporary relevance. The university is committed to promoting excellence through holistic development of the students with thrust of research aimed at unleashing the creative potential of every student.

It is our belief that these goals can be best achieved through transparency, democratic values, accountability and accessibility in an atmosphere that fosters intellectual freedom. It is our constant endeavour to actively ingrain these values into the day-to-day functioning of the university.

The campus combines state-of-the-art, infrastructure with basic amenities. We are working constantly to develop the campus further to an extent where all stake holders look forward to for a better future of our students along with providing them with opportunities to transform themselves into successful professionals .

As a member of the University family since its inception and as its founder Registrar, I feel extremely proud to present this newsletter, Bits and Bytes to one and all. I congratulate the entire team for their hard work and appreciate the way they have envisioned and shaped the Newsletter in its present form.



(Sri S. N. Jha)  
Registrar



## MESSAGE BY THE VICE CHANCELLOR

Indira Gandhi Delhi Technical University for Women has been able to mark its presence in the capital of the country as a value based technical university, which is successfully imparting quality education to the better half of the total population.

The success of an educational institution is measured by the quality and achievements of its students and faculty members and I feel immensely proud in sharing that our students are winning awards and honours in academic and technical competitions within India and abroad. Similarly the academic accomplishments of our faculty members are being recognized in the form of scholarly and research articles being published in National and International journals of repute. The university has academic alliances with industries along with multiple sponsored research projects, out of which many have been completed successfully.

New industry relevant UG and PG courses are being launched every year to prepare industry ready graduates and professionals. The university administration and staff members are working tirelessly to enable the campus to emerge as one of the most tech savvy and student friendly university in the city.

Keeping in mind the holistic development and grooming of our girls, they are being provided with a variety of opportunities to form clubs, societies, committees, and organise technical and cultural festivals, wherein they are not just participating but organizing these events as well. As a result, they are developing numerous skills which will help them immensely in transforming themselves from a student to successful professional. The result of these efforts can be clearly seen in the campus placements. The students of our University are being placed in many prestigious companies and continue to excel in higher studies within India and abroad.

I am proud to release the first newsletter of the newly formed university and congratulate the entire editorial team of Bits and Bytes for collating the information and news about student and faculty's achievements made since the inception of the University in 2013. As the founder VC, I am extremely confident that Indira Gandhi Delhi Technical University for Women will continue to scale new heights and would continue to empower young girls of our country with high quality technical education while nurturing them to become self-reliant individuals sensitive towards the environment and societal issues.

A handwritten signature in black ink on a light blue background, reading "Nupur Prakash".

(Prof. Nupur Prakash)  
Vice-Chancellor

## **BRIEF HISTORY : TRANSFORMATION FROM IGIT TO IGDTUW**

It is the hard work and efforts of various people which results in transforming an existing system into a bigger and much larger entity. The metamorphosis of IGIT into IGDTUW was not possible and was unimaginable without the able guidance, mentorship and supervision of our Hon'ble Vice Chancellor Prof. Nupur Prakash, former Principal- IGIT. It was she who tirelessly, along with the entire IGIT family converted this dream into reality. The University has been recognised by UGC under Section 22 to offer UG, PG and Doctoral programs. The AIU membership has also been obtained w.e.f 1<sup>st</sup> April, 2014 for the newly formed IGDTUW.

The University in its present form preserves the vision and mission of IGIT along with imbibing the contemporary aspects of academic and administrative endeavours with renewed zeal and rigour on a much larger scale in its core philosophies. IGDTUW can be seen as a young women technical University with immense potential to be recognized as one of the pioneering academic institutions of the country in due course of time.

To turn this aspiration into reality the University has already started expanding its Infrastructure, Faculty and staff intake and launched several new and highly relevant courses and programmes. The following four regular M.Tech programs in Information Security Management, VLSI Design, Mobile and Pervasive Computing, Robotics and Automation have been started with an intake of 30 students each. The Ph.D program in various branches of Engineering, Science and Technology has been launched from the session 2014-15. The Teaching cum Research Fellowship has been introduced for full time Research Scholars.

A number of Continuing Education Programs in the form of Faculty Development Programs, Students Training Programs and Workshops, Extension lectures, etc. have been conducted so far. The University has received research grants from various external agencies for taking up industry relevant research and consultancy in various area of social relevance.

The University has developed a Learning Resource Centre serving as the premier source of academic information for the university community through its rich collection of academic books, journals and documents with innovative technology and physical facilities. IGDTUW has procured a large number of desktop computers with latest configuration, laser printers and scanners for Academic and Examination department in recent times. The campus wide networking of IGDTUW is being revamped for high speed connection for accessing internet by students, faculty and staff through wired and wi-fi network. The University also maintains a website for hosting latest information and activities of the University.



## AWARDS AND ACCOLADES

*A university or any organization is known not by the brick and mortar structure but by the people that guide, mentor, constitute and contribute to the aura of that institute ably through leading by example. We invite you to witness the journey of accomplishments of our Hon'ble Vice Chancellor which is undoubtedly a great source of motivation and inspiration for all the members of the IGDTUW family.*

### Prof. Nupur Prakash, Vice Chancellor

Prof. Nupur Prakash is recognized as a renowned academician and an able administrator par excellence not only in India but also abroad. She has been honoured with several prestigious awards and titles for her contribution to various streams of academics and administration.

- She has received the “JGBS-Top Rankers Excellence Award for Women Role Model”, at the Top Rankers Excellence Award Ceremony held in Delhi on 16<sup>th</sup> January, 2015.
- She has recently been honoured for “Outstanding Contribution to Education” at 22nd Devang Mehta Business School Award (BSA) Ceremony held in Mumbai on 15th Nov 2014.
- She has been recognized as an inspiring Women Eduleader for the year 2014 by Engineering Watch on International Women’s Day in 2014





22nd Devang Mehta Business School  
Award (BSA) Ceremony held in  
Mumbai on 15th Nov 2014



Women Eduleader award Ceremony chaired by HRD Minister, Govt. of India



Attended 10th eIndia Summit on  
e-Governance in Trivendram,  
Kerala as a Keynote speaker



Participated in Sangam 2014 organised  
by TCS in Bangalore on Digital Five Forces:  
Re-Imagining Education

# FACULTY ACCOMPLISHMENTS

*Education is a continuous process which keeps the mind active, creative and innovative. Knowledgeable teachers are the intellectual capital and the backbone of an educational institution. The faculty at IGDTUW has completed or are pursuing their PhDs from reputed institutions like IITs, Delhi University, DTU etc. They are always encouraged to move beyond the boundaries of regular teaching work and explore avenues for research and academic growth and needless to say they have surpassed all expectations. Their scholastic as well as achievements in several other areas are as follows.*

## CSE Department

### A. Dr. S.R.N. Reddy, Associate Professor and Head

- Received a travel grant from Intel to present a Poster on “Intel - IGDTUW Collaborative Results & Activities. A Case Study” at the Embedded Research and Education Summit held during March 11 – 13, 2015, at Chandler, Arizona USA.
- Received a travel grant from Intel to present a Poster on “An integrated methodology for



the Design and Development of the device for IoT applications by using Intel Galileo platform” at Intel Asia Academic Forum held from November 18 – 19, 2014 at Taipei, Taiwan.

### B. Prof. Ela Kumar, Professor

Expert lectures / conference / seminars / workshops delivered / attended:

- Attended a three day workshop on NBA accreditation process conducted by JSS Noida on 26<sup>th</sup>, 27<sup>TH</sup> AND 28<sup>TH</sup> Nov'2014.
- Attended a one day workshop on NBA accreditation process conducted by MHRD on 25<sup>th</sup>, Feb '2015.

### C. Dr. Seeja K.R, Associate Professor

List of Publications:

- **K.R.Seeja**, “Feature Selection based on Closed Frequent Item set Mining: A case study with SAGE Data Classification”, Neurocomputing Volume 151, Part 3, Pages 1027–1032, 2015 (**Impact factor:2.005**) <http://www.sciencedirect.com/science/article/pii/S0925231214013411>

### D. Mr. Sumit Kr. Yadav, Assistant Professor

List of Publications

- **Sumit Kr Yadav** & Mayank Bhushan, “Cost based Model for Big Data Processing with Hadoop Architecture”, Global Journal of Computer Science and Technology (GJCST), Volume 14 Issue 2 Version 1.0, Global Journal Inc.(USA).[https://globaljournals.org/GJCST\\_Volume14/EJournal\\_GJCST\\_%28C%29\\_Vol\\_14\\_Issue\\_2.pdf](https://globaljournals.org/GJCST_Volume14/EJournal_GJCST_%28C%29_Vol_14_Issue_2.pdf)
- **Sumit Kr Yadav**, Fawaz S.Al-Anzi, Jyoti Soni, “Cloud Computing: Security Model Comprising Governance, Risk Management



and Compliance”, International Conference on Data Mining and Intelligent Computing, 2014 <http://ieeexplore.ieee.org/xpl/articleDetails.jsp?tp=&arnumber=6954232&queryText%3Dcloud+computing+security+model>

- **Sumit Kr Yadav** et al, “Bloom Filter Based Optimization H Base with Map Reduce”, International Conference on Data Mining and Intelligent Computing , 2014. <http://ieeexplore.ieee.org/xpl/articleDetails.jsp?tp=&arnumber=6954230&queryText%3Dbloom+filter+based+optimization>
- **Sumit Kr Yadav** et al, “Polarity Detection of Sarcastic Political Tweets”, INDIACom-2014; International Conference on “Computing for Sustainable Global Development”, 2014. <http://ieeexplore.ieee.org/xpl/articleDetails.jsp?tp=&arnumber=6828037&queryText%3Dd+k+tayal>

Expert lectures/conference/seminars/workshops delivered/attended:

- Organized an International Conference as Faculty coordinator on Data Mining and Intelligent Computing (ICDMIC-2014), on 5th and 6th Sept. 2014 at IGDTUW.
- Attended a Workshop on Intellectual Property Rights Awareness, organised by Research Wing-IGDTUW and sponsored by DeitY on 26th September 2014.
- Participated in a Five day Faculty Development Programme on “Effective Teaching Methodologies” organised by Deptt of Applied Science IGDTUW and NITTTR Chandigarh from 21st July’ 2014 - 25th July’ 2014.
- Delivered an expert talk on the topic “Big Data: Research issues & Big Challenges in Real World” at the 5th Summer Training Program on Mobile Architecture and Programming organized by Department of CSE, IGDTUW in collaboration with Nokia University Relations, Finland on June 13, 2014.
- Attended the 5th IIT-Hyderabad Advanced Summer School on NLP- Natural language

Processing (IASNLP-2014) held at IIT Hyderabad from 1st-15th July 2014.

- Delivered an expert talk on topic “Big Data: Big Challenges in Real World” at a faculty development programme organized by Delhi Institute of Advanced Studies on June 13, 2014.
- Attended a one day conference on “Elets Cloud Gov 2014” organized by Elets Technomedia, on June 10, 2014 at Royal Plaza, New Delhi.
- Attended a Lecture on “Solving real time problems using fuzzy logic” at a National Seminar on Computing & Intelligent Systems (NSCIS 2014), Ghaziabad, U.P, INDIA (Sponsored by AICTE, Delhi) 28th March, 2014.
- Attended a conference on “ORACLE CLOUDWORLD” conducted by Oracle on 22 Jan 2014 at Taj Palace Hotel Sardar Patel Marg, Diplomatic Enclave, New Delhi.

#### E. Ms. Monika, Assistant Professor

Expert lectures/conference/seminars/workshops delivered/attended

- Acted as Faculty coordinator in an International Conference on Data Mining and Intelligent Computing (ICDMIC-2014) dated 5th & 6<sup>th</sup> September, 2014 at IGDTUW.
- Attended a Workshop on Intellectual Property Rights Awareness, organised by Research Wing-IGDTUW and sponsored by DeitY on 26th September 2014.
- Delivered an expert talk on the topic “Internet of Things (IoT)” at 5th Architecture and Programming Conference, organized by department of CSE, IGDTUW, in collaboration with Nokia University Relations, Finland on July 16, 2014.

## **F. Ms. Smita Kapur, Assistant Professor**

Expert lectures/conference/seminars/workshops delivered/attended

- Worked as Faculty coordinator for "International Conference on Data Mining and Intelligent Computing (ICDMIC-2014)", dated 5th and 6th Sept. 2014 at IGDTUW.
- Attended a Workshop on Intellectual Property Rights Awareness, organised by Research Wing-IGDTUW and sponsored by DeitY on 26th September 2014.
- Participated in a Five day Faculty Development Programme on "Effective Teaching Methodologies" organised by Deptt of Applied Science IGDTUW and NITTTR Chandigarh from 21st July' 2014 - 25th July' 2014.
- Delivered an expert talk on the topic "Mobile Information Retrieval" at 5th Summer Training Program on Mobile Architecture and Programming organized by Department of CSE, Indira Gandhi Delhi Technical University for Women in collaboration with Nokia University Relations, Finland on June 13, 2014.

## **ECE Department**

### **A. Dr. Ashwini Kumar, Professor and Head**

List of Publications:

- Mitigation of atmospheric turbulence in free space optics- A Review, Fifteenth International Conference on Advanced Computing & Communication Technologies."

### **B. Dr. Jasdeep Kaur, Associate Professor**

List of Publications:

- " High Performance Low Voltage Analog Design using Self Cascode Structures", Journal of Active and Passive Electronic

Devices, (JAPED) Old City Publishing, Philadelphia USA, pages 141-155, volume 9, no. 2-3, 2014.

- "FGMOSBasedCurrentMirror", International Journal of Advanced Research in Computer Science and Software Engineering, IJARCSSE Volume 4, Issue 8, ISSN: 2277 128X, August 2014.
- "Testing of Low Voltage Two Stage Operational Amplifier Using Oscillation Test Methodology", accepted for IEEE International Conference on Signal Processing and Communication, at Jaypee Institute of Information Technology, Noida, U.P.(India) 16-18 March 2015.

Expert lectures/conference/seminars/workshops delivered/attended:

- National Workshop on Analog IC Design organized by BVCOE and IEEE INDIA SSCS Chapter at BVCOE (affiliated to GGSIPU), on 21<sup>st</sup> August 2014.
- 4<sup>th</sup> National Workshop on Recent Trends in Semiconductor Devices & Technology, organized by Deen Dayal Upadhyaya College, DU, in association with IEEE-EDC Delhi Chapter and DRDO, on September 12-13, 2014,
- IEEE SSCS Delhi Chapter Tutorial on Tutorials on Synthesis of opamp & phase-locked loop topologies from first principles and A Model-Agnostic Technique for Simulating Per-Element Distortion Contributions by Dr. Nagendra Krishnapura, Electrical Engineering Department, IIT Madras on 20th of October 2014 at ST Microelectronics Greater Noida.
- IEEE sponsored Workshop on "Trends in CMOS based Analog Signal Processing and VLSI Design" at BPIT, (affiliated to GGSIPU), Rohini, on 27<sup>th</sup>-28<sup>th</sup> Feb. 2014
- Distinguished Lecture Colloquia organized by IEEE SSCS Delhi Chapter at STMicroelectronics, Greater Noida on 19th December 2014.



- IEEE Delhi Section AGM at IITD on 22nd February, 2015.

### C. Dr. Nidhi Goel, Associate Professor

List of Publications:

- Published one book chapter, "Mobile Worms and Viruses, in Information Security in Diverse Computing Environments", Anne Kayem, Christoph Meinel (Editors), IGI Global, 2014, pp. 206-229.
- Published research paper "Chaos based Joint Compression and Encryption Framework for End-to-End Communication Systems", Advances in Multimedia, Hindawi, vol. 2014, Article Id- 910106, 10 pages, 2014.
- "A Secure and high Payload Digital Audio Watermarking using features from Iris Image", International Conference on Contemporary Computing and Informatics (IC3I), Mysore, India, November 2014.
- "A High payload Audio Watermarking Algorithm Robust against MP3 Compression", IEEE International Conference on Contemporary Computing, JIIT Noida, August 2014.

Expert lectures/conference/seminars/workshops delivered/attended:

- Attended TEQIP-II Sponsored two week Short Term Training programme on Advanced Web Designing Techniques, at DTU from 14th July 2014- 25th July 2014.
- Attended a UGC Sponsored Short Term Training Programme on Integrating Renewable Energy Sources into Emerging Electrical Power Systems, during December 08-19, 2014.

### D. Ms. Vandana Niranjan, Assistant Professor

List of Publications:

- Vandana Niranjan, Ashwani Kumar, Shail Bala Jain," Low-voltage gate and body driven selfbiased cascode current mirror with enhanced bandwidth", International Journal of Circuits and Architecture Design,

Inderscience Publishers, Switzerland, 2015.

- Vandana Niranjan, Ashwani Kumar, Shail Bala Jain, "Composite transistor cell using dynamic body bias for high gain and low-voltage applications", Journal of Circuits, Systems, and Computers 23: 8, 2014.
- Vandana Niranjan, Ashwani Kumar, Shail Bala Jain, "Maximum Bandwidth Enhancement of current mirror using series-resistor and dynamic body bias technique", Radioengineering 23: 3. 922930, 2014.
- Vandana Niranjan, Ashwani Kumar, Shail Bala Jain, "Lowvoltage and High-speed Flipped Voltage Follower Using DMOS transistor", IEEE International Conference on Signal Propagation and Computer technology(ICSPCT) Government. Engineering College Ajmer, India, 2014
- Vandana Niranjan, Akanksha Singh, Ashwani Kumar, "Dynamic Threshold MOS transistor for Low Voltage Analog Circuits", International Conference on Recent Trends & Issues in Engineering and Technology(ICRTET) D.J. College of Engineering and Technology, Modinagar, India, 2014.

### E. Mr. Akash Tayal, Assistant Professor

List of Publications:

- Paper titled "Chaotic Simulated Annealing for Solving Stochastic Dynamic Facility Layout Problem" was communicated and accepted for presentation at IABE-2014 VERONA - Summer Conference, JUNE 27-29, 2014 and publication in the Journal of International Management Studies.
- Paper titled, "Efficiency Analysis of Chaotic Functions in Chaotic Simulated Annealing for Solving Stochastic Dynamic Facility Layout Problem" presented at the 11<sup>th</sup> Annual World Congress of the Academy for Global Business Advancement (AGBA), held at DMS, IIT Delhi, Nov 20—23, 2014. The abstract was accepted in "Book of Abstracts – Advances in Global Business Research" Vol. 11, No. 1-ISSN: 1549-9332.
- Paper titled "Integrated SA-DEA-TOPSIS

based solution approach for Multi Objective Stochastic Dynamic Facility Layout Problem" was communicated and accepted for presentation at International Conference on Evidence Based Management 2015 (ICEBM2015).

### F. Mr. Pankaj Gupta, Assistant Professor

List of Publications:

- "Average Absolute Frequency Deviation Value based Active Islanding Detection Technique", IEEE Transactions on Smart Grid, vol. 6, issue 1, pp. 26-35, Jan 2015. (Impact Factor: 4.334).

### G. Ms. Greeshma Arya, Assistant Professor

List of Publications:

- "Performance Analysis of LEACH-SCH Protocol for Wireless Sensor Network in Heterogeneous and Homogeneous Region Considering Variable Length of Packet" in IJARCCE, Vol. 3, Issue 7, July 2014.
- "Performance Improvement of Enhanced Heterogeneous LEACH routing protocol" in IJECS, vol. 3, issue 10, Dec 2014.
- "Optimally Distributed Energy Efficient Clustering Protocol For Wireless Sensor Networks" in IJARCCE, vol. 3, July 2014.

### H. Mr. Ejaz Lodhi, Assistant Professor

Expert lectures/conference/seminars/workshops delivered/attended:

- Three days short Term Course on Cognitive Radio: A new paradigm in Wireless Communication, Oct, 2013 at IIT Kanpur.
- One week short Term Course on "INDIAN ANTENNA WEEK", Chandigarh, JW Marriott Hotel, May 2014
- A one day IEEE MTT-S Workshop on Microwave and RF, AIT Geeta Colony, Delhi, Dec, 2014

## IT Department

### A. Prof. R. K. Singh, Professor & Head

List of Publications:

- Chandra Pravin, **Singh R.K.** and Singh Yogesh. " Review and Extension of Fault Class Hierarchy for Testing Boolean Specification", Paper Accepted in International Journal of Computer Applications in Technology, Inderscience.
- Meera Sharma, Madhu Kumari, **R K Singh**, and VBSingh, "MultiattributeBased Machine Learning Models for Severity Prediction in Cross Project Context", ICCSA 2014, Part V LNCS 8583, pp. 227–241, 2014, Springer International Publishing Switzerland 2014.
- Ritu Garg and **R.K. Singh**, "Challenges of Semantic Clone Detection, National Conference on Emerging Computing Technologies and ICT for Development" (NCECT & ICTD - 2015) ON 28th Feb. 2015 , A-5 , Pp. No. 17

Expert lectures/conference/seminars/workshops delivered/attended:

- One Week Faculty Development Programme on "Effective Teaching" conducted by National Institute of Technical Teachers Training and Research, Chandigarh, held at IGDTUW on 21<sup>st</sup> – 25<sup>th</sup> July 2014.
- One day Workshop on "Intellectual Property Rights" organized by Research Wing, IGDTUW, Delhi during 29<sup>th</sup> September , 2014.
- One day IEEE International Conference on "Data Mining and Intelligent Computing" organized by South Asian University, Delhi during 5<sup>th</sup> – 6<sup>th</sup> September, 2014.



## B. Dr. A. K. Mohapatra, Associate Professor

List of Publications:

- Ankita Khandelwal, **Amar K Mohapatra**, "An Insight into the Security Issues and Their Solutions for Android Phones", Proceedings of the 9<sup>th</sup> INDIACom, INDIACom-2015, IEEE Conference ID: 350712015 2<sup>nd</sup> International Conference on "Computing for Sustainable Global Development", 2015.
- Sonia Gupta, **Amar K Mohapatra**, M. Ahmad, "[A Bio-Chaotic Block Cryptosystem for Privacy Protection of Multimedia Data](#)", Advances in Intelligent Systems and Computing, Vol 247, pp-527-535, Springer, 2014.

Expert lectures/conference/seminars/workshops delivered/attended:

- One Week Faculty Development Programme on "Effective Teaching" conducted by National Institute of Technical Teachers Training and Research, Chandigarh, held at IGDTUW on 21<sup>st</sup> – 25<sup>th</sup> July 2014.
- 2<sup>nd</sup> International Conference on "Cyber Law, Cyber Crime and Cyber Security" conducted by Pavan Duggal Associates, held at India International Centre on 20<sup>th</sup> November, 2014.
- Delivered an Expert Lecture in Delhi Police Training College on " Windows Registry Analysis and email forging "
- Keynote Speaker in the National Conference on Emerging Trends in Information Technology 2015 ( 21<sup>st</sup> March 2015 )
- One day Workshop on "Intellectual Property Rights" organized by Research Wing, IGDTUW, Delhi during 29<sup>th</sup> September, 2014.
- One day IEEE International Conference on "Data Mining and Intelligent Computing" organized by South Asian University, Delhi during 5<sup>th</sup> – 6<sup>th</sup> September, 2014.

## C. Dr. Arun Sharma, Associate Professor

List of Publications:

- Shraddha Sagar, P. Mathur, **Arun Sharma**, "Multi-Criteria Selection Of Software Components Using Fuzzy-Ahp Approach", International Journal of Innovative Computing, Information and Control Volume 11, Number 3, SCOPUS Index, June 2015 (in Press) (Impact Factor: 1.44)
- Renuka Nagpal, Deepti Mehrotra, Pradeep Kumar Bhatia and **Arun Sharma**, "Rank University Websites Using Fuzzy AHP and Fuzzy TOPSIS Approach on Usability", International Journal of Information Engineering and Electronic Business, Volume 7, Number 1, pp: 29-36, 2015.
- Pradeep Kumar Singh, Om Prakash Sangwan, **Arun Sharma**, "A Study and Review on the Development of Mutation Testing Tools for Java and Aspect-J Programs", International Journal of Modern Education and Computer Science, Volume 6, Number 11, pp: 1-10, 2014.

Expert lectures/conference/seminars/workshops delivered/attended:

- IEEE sponsored International Conference Innovative Applications of Computational Intelligence Power, Energy and Control (CIPECH – 14) held at Krishna Institute of Engineering and Technology, Ghaziabad on 29<sup>th</sup> November, 2014.
- Workshop on "Cyber Security " jointly conducted by IIT Delhi – University of Nebraska at Omaha, held at IIT Delhi on 7<sup>th</sup> – 8<sup>th</sup> February, 2014.
- One day IEEE International Conference on "Data Mining and Intelligent Computing" organized by South Asian University, Delhi during 5<sup>th</sup> – 6<sup>th</sup> September, 2014.

## **D. Dr. Kalpana Yadav, Assistant Professor**

List of Publications:

- S.K.Yadav, **K. Yadav**, S.Gupta, "Multimodal Sentiment Analysis: Sentiment Analysis using Audiovisual Format", published in 2nd International Conference on Computing for Sustainable Global Development, IEEE Conference ID: 35071, 11th -13th March, 2015.

Expert lectures/conference/seminars/workshops delivered/attended:

- One Week Faculty Development Programme on "Effective Teaching" conducted by National Institute of Technical Teachers Training and Research, Chandigarh, held at IGDTUW on 21<sup>st</sup> – 25<sup>th</sup> July 2014.
- One day Workshop on "Intellectual Property Rights" organized by Research Wing, IGDTUW, Delhi during 29<sup>th</sup> September , 2014.
- One day IEEE International Conference on "Data Mining and Intelligent Computing" organized by South Asian University, Delhi during 5<sup>th</sup> – 6<sup>th</sup> September, 2014.
- 1st International Conference on "Cyber Law, Cyber Crime and Cyber Security" conducted by Pavan Duggal Associates, held at India International Centre on 13th March, 2014.

## **E. Mr. Rishabh Kaushal, Assistant Professor**

List of Publications:

- Arushi Gupta and **Rishabh Kaushal**, "Improving Spam Detection in Online Social Networks", International Conference on Cognitive Computing and Information Processing (CCIP), 3<sup>rd</sup> – 4<sup>th</sup> March, 2015. (Best Paper Award)
- Anuja Bhakuni, Parul Sharma and **Rishabh Kaushal**, "Free Rider Detection and Punishment in BitTorrent based P2P Networks", IEEE International Conference

on Advance Computing Conference (IACC), 2014.

Expert lectures/conference/seminars/workshops delivered/attended:

- Technical Co-Chair, 3rd Security & Privacy Symposium, IIIT Delhi, 13th – 14th February, 2015.
- One Week Faculty Development Programme on "Effective Teaching" conducted by National Institute of Technical Teachers Training and Research, Chandigarh, held at IGDTUW on 21<sup>st</sup> – 25<sup>th</sup> July 2014.
- 1st International Conference on "Cyber Law, Cyber Crime and Cyber Security" conducted by Pavan Duggal Associates, held at India International Centre on 13th March, 2014.
- 2<sup>nd</sup> International Conference on "Cyber Law, Cyber Crime and Cyber Security" conducted by Pavan Duggal Associates, held at India International Centre on 20<sup>th</sup> November, 2014.
- 3<sup>rd</sup> Security and Privacy Symposium sponsored by ACM India, held at IIIT, Delhi on 13<sup>th</sup> – 14<sup>th</sup> February, 2015.
- One day Workshop on "Intellectual Property Rights" organized by Research Wing, IGDTUW, Delhi during 29<sup>th</sup> September, 2014.
- One day IEEE International Conference on "Data Mining and Intelligent Computing" organized by South Asian University, Delhi during 5<sup>th</sup> – 6<sup>th</sup> September, 2014.

## **F. Ms. Aruna Bhat, Assistant Professor**

List of Publications:

- Anshu Yadav, Aruna Bhat, Rajni Jindal, Stack Implementation of Adjacency List for Representation of Graphs, Confluence'2013,



IEEE Fourth International Conference on Next Generation IT Summit, ISBN: 978-93-81583-63-0, DOI: 10.1049/cp.2013.2349., IET, Pages: 419 – 423.

Expert lectures/conference/seminars/workshops delivered/attended

- One Week Faculty Development Programme on “Effective Teaching” conducted by National Institute of Technical Teachers Training and Research, Chandigarh, held at IGDTUW on 21<sup>st</sup> – 25<sup>th</sup> July 2014.
- Faculty Coordinator, 4<sup>th</sup> Summer Workshop on “Web/Mobile and Cloud Computing Application development through .Net”, June-July, 2014.
- One day Workshop on “Intellectual Property Rights” organized by Research Wing, IGDTUW, Delhi during 29th September, 2014.
- One day IEEE International Conference on “Data Mining and Intelligent Computing” organized by South Asian University, Delhi during 5<sup>th</sup> – 6<sup>th</sup> September, 2014.
- Workshop on “Cyber Security ” jointly conducted by IIT Delhi – University of Nebraska at Omaha, held at IIT Delhi on 7th – 8th February, 2014.
- 1st International Conference on “Cyber Law, Cyber Crime and Cyber Security” conducted by Pavan Duggal Associates, held at India International Centre on 13th March, 2014.

## G. Ms. Nidhi Arora, Assistant Professor

Expert lectures/conference/seminars/ workshops delivered/attended

- One Week Faculty Development Programme on “Effective Teaching” conducted by National Institute of Technical Teachers Training and Research, Chandigarh, held at IGDTUW on 21<sup>st</sup> – 25<sup>th</sup> July 2014.
- One day Workshop on “Intellectual Property Rights” organized by Research Wing, IGDTUW, Delhi during 29<sup>th</sup> September , 2014.

- Workshop on “Cyber Security ” jointly conducted by IIT Delhi – University of Nebraska at Omaha, held at IIT Delhi on 7th – 8th February, 2014.

- One day IEEE International Conference on “Data Mining and Intelligent Computing” organized by South Asian University, Delhi during 5<sup>th</sup> – 6<sup>th</sup> September, 2014.

## H. Ms. Kokila Gupta, Assistant Professor

Expert lectures/conference/seminars/workshops delivered/attended

- One Week Faculty Development Programme on “Effective Teaching” conducted by National Institute of Technical Teachers Training and Research, Chandigarh, held at IGDTUW on 21<sup>st</sup> – 25<sup>th</sup> July 2014.
- Faculty Coordinator, 4<sup>th</sup> Summer Workshop on “Web/Mobile and Cloud Computing Application development through .Net”, June-July, 2014.
- One day IEEE International Conference on “Data Mining and Intelligent Computing” organized by South Asian University, Delhi during 5<sup>th</sup> – 6<sup>th</sup> September, 2014.
- 1st International Conference on “Cyber Law, Cyber Crime and Cyber Security” conducted by Pavan Duggal Associates, held at India International Centre on 13th March, 2014.
- One day Workshop on “Intellectual Property Rights” organized by Research Wing, IGDTUW, Delhi during 29<sup>th</sup> September, 2014.

## I. Ms. Neetika Bhandari, Assistant Professor

Expert lectures/conference/seminars/workshops delivered/attended

- One Week Faculty Development Programme on “Effective Teaching” conducted by National Institute of Technical Teachers Training and Research, Chandigarh, held at IGDTUW on 21<sup>st</sup> – 25<sup>th</sup> July 2014.

- Faculty Coordinator, 4<sup>th</sup> Summer Workshop on “Web/Mobile and Cloud Computing Application development through .Net”, June-July, 2014.
- One day IEEE International Conference on “Data Mining and Intelligent Computing” organized by South Asian University, Delhi during 5<sup>th</sup> – 6<sup>th</sup> September, 2014.
- One day Workshop on “Intellectual Property Rights” organized by Research Wing, IGDTUW, Delhi during 29<sup>th</sup> September , 2014.

#### **J. Ms. Charu Gupta, Assistant Professor**

Expert lectures/conference/seminars/workshops delivered/attended

- One Week Faculty Development Programme on “Effective Teaching” conducted by National Institute of Technical Teachers Training and Research, Chandigarh, held at IGDTUW on 21<sup>st</sup> – 25<sup>th</sup> July 2014.
- One day IEEE International Conference on “Data Mining and Intelligent Computing” organized by South Asian University, Delhi during 5<sup>th</sup> – 6<sup>th</sup> September, 2014. .
- One day Workshop on “Intellectual Property Rights” organized by Research Wing, IGDTUW, Delhi during 29th September , 2014.
- Workshop on “Cyber Security ” jointly conducted by IIT Delhi – University of Nebraska at Omaha, held at IIT Delhi on 7th – 8th February, 2014.
- Attended AICTE sponsored 15 days faculty development programme on Information & Cyber Security Management, Organised by Department of CSE, GB Pant University of Agricultural University, Pant Nagar. 22 December 2013 – 5 January 2014.

## **MAE Department**

### **A. Dr. Nathi Ram Chauhan, Associate Professor & Head**

List of Publications:

- **Nathi Ram**, Satish C. Sharma, “A Study of Misaligned Hole-Entry Worn Journal Bearing Operating in Turbulent Regime”, Industrial Lubrication and Tribology (Emrald), Vol. 65, No. 2, pp. 108-118, 2013. (Impact Factor = 0.316)
- **Nathi Ram**, Satish C. Sharma, “Influence of Wear on the Performance of Non-Recessed Hole-Entry Hybrid Misaligned Journal Bearing in Turbulent Regime”, Industrial Lubrication and Tribology (Emrald), Vol. 66, No. 4, pp. 509-519, 2015. (Impact Factor = 0.316)
- **Nathi Ram**, Satish C. Sharma, “Performance of CFV Compensated Asymmetric Roughened Hole-Entry Hybrid Journal Bearing operating with Micropolar Lubricants”, ASIATRIB-2014 International Conference, Jaypee Palace Hotel & Convention Center, Agra, India, February 17-22, 2014.
- **Nathi Ram**, Satish C. Sharma, “Analysis of Hole-Entry Hydrostatic Journal Bearing System operating with Couple Stress Lubricants”, Proceedings of International Conference on Advances in Tribology (ICAT14), Technology Letters CART, National Institute of Technology Calicut, Kerala, India, pp. 172-175, February 21-24, 2014.
- **Nathi Ram**, Satish C. Sharma, “Performance of Circular Symmetric Hole-Entry Worn Hybrid Journal Bearing operating in Turbulent Regime”, Proceedings of International Conference on Advances in Tribology (ICAT14), Technology Letters CART, National Institute of Technology Calicut, Kerala, India, pp. 176-179, February 21-24, 2014.
- **Nathi Ram**, Satish C. Sharma, Saurabh Yadav, “Static Performance of Hole-Entry Hybrid Journal Bearing operating under Turbulent



Regime”, Proceedings of 2<sup>nd</sup> National Tribology Conference (NTC-2014), PES University, Bangalore, Karnataka, India, Paper No. NTC-201124, December 15-17, 2014.

- **Nathi Ram**, Satish C. Sharma, Saurabh Yadav, “Performance of Asymmetric Misaligned Hole-Entry Hybrid Worn Journal Bearing under Turbulent Lubrication”, STLE’s Tribology Frontiers Conference, Chicago, Illinois, USA, to be held on October 26-28, CONTROL ID: 1997928, 2014.
- **Nathi Ram**, Satish C. Sharma, “Performance of Symmetric Slot-Entry Hybrid Journal Bearing in Turbulent Regime” Proceedings of 70<sup>th</sup> STLE Annual Meeting & Exhibition Omni Hotel, Dallas, Texas, USA, May 17-21, 2015. (Accepted).
- **Nathi Ram**, Satish C. Sharma, “Performance of CFV Compensated Asymmetric Roughened Hole-Entry Hybrid Journal Bearing operating with Micropolar Lubricants”, ASIATRIB-2014 International Conference, Jaypee Palace Hotel & Convention Center, Agra, India, February 17-22, 2014.
- **Nathi Ram**, Satish C. Sharma, “Analysis of Hole-Entry Hydrostatic Journal Bearing System operating with Couple Stress Lubricants”, Proceedings of International Conference on Advances in Tribology (ICAT14), Technology Letters CART, National Institute of Technology Calicut, Kerala, India, pp. 172-175, February 21-24, 2014.
- **Nathi Ram**, Satish C. Sharma, “Performance of Circular Symmetric Hole-Entry Worn Hybrid Journal Bearing operating in Turbulent Regime”, Proceedings of International Conference on Advances in Tribology (ICAT14), Technology Letters CART, National Institute of Technology Calicut, Kerala, India, pp. 176-179, February 21-24, 2014.

Expert lectures/conference/seminars/workshops delivered/attended:

- Participated in a FDP on “Recent Trends in Big Data and Cloud Computing” IGDTUW, Delhi from Dec 16, 2013 to Dec 20, 2013 (one week).

- Participated in a Short Term Course (AICTE recognised) on “Effective Teaching” conducted by NITTTR, Chandigarh at IGDTUW, Delhi from July 21, 2014 to July 25, 2014 (one week).
- Participated in a one day Workshop on “Intellectual Property Rights Awareness” IGDTUW, Delhi from Sept.26, 2014.

## B. Dr. Manoj Soni, Associate Professor

Patents:

- Dr Manoj Soni; **An above knee prosthetic kit**, Patent - Design Representation; IPR India; No. 257376, Granted: 10-10-2013, class 24-03.
- Dr Manoj Soni; **Below Knee prosthetic kit**, Patent - Design Representation; IPR India; No. 263751, Granted: 14-1-2015, class 24-03.

Expert lectures/conference/seminars/workshops delivered/attended:

- Participated in a two week ISTE Workshop conducted by IIT Kharagpur under National Mission on Education through ICT (MHRD) on Control Systems from 2<sup>nd</sup> -12<sup>th</sup> December 2014.
- Organized & attended a one day seminar on Recent Trends in Renewable Energy for Mechanical Applications, jointly sponsored by CSIR & MNRE on 11<sup>th</sup> September, 2014 at MAIT, Rohini, Delhi.
- Organized & participated in a two week ISTE Workshop conducted by IIT Kharagpur under National Mission on Education through ICT (MHRD) on Fluid Mechanics from 20<sup>th</sup> – 30<sup>th</sup> May, 2014.

## C. Dr. O.K. Singh, Assistant Professor

List of Publications:

- **Singh, O.K.**, Kaushik, S.C., 2013, “Variables influencing the exergy based performance of a Steam Power Plant”, International Journal of Green Energy 10, 257-284. (Impact Factor: 1.469).

- **Singh, O.K.**, Kaushik, S.C., 2013, "Energy and Exergy Analysis and Optimization of Kalina Cycle Coupled with a Coal Fired Steam Power Plant", Applied Thermal Engineering 51(1-2), 787-800. (Impact Factor: 2.624).
- **Singh, O.K.**, Kaushik, S.C., 2013. Reducing CO<sub>2</sub> emission and improving exergy based performance of natural gas fired combined cycle power plants by coupling Kalina cycle. Energy 55, 1002-1013. (Impact Factor: 4.159).
- **Singh, O.K.**, Kaushik, S.C., 2013. Thermoeconomic evaluation and optimization of a Brayton-Rankine-Kalina combined triple power cycle. Energy Conversion and Management 71, 32-42. (Impact Factor: 3.590).
- **Singh, O.K.**, Panwar, N.L., 2013. Effects of thermal conductivity and geometry of materials on the temperature variation in packed bed solar air heater. Journal of Thermal Analysis and Calorimetry 111, 839-847. (Impact Factor: 2.206).
- **Singh, O.K.**, Kaushik, S.C., 2014. Exergoeconomic analysis of a Kalina cycle coupled coal-fired steam power plant. International Journal of Exergy 14(1), 38-59. (Impact Factor: 0.847).
- Kaushik, S.C., **Singh, O.K.**, 2014. Estimation of chemical exergy of solid, liquid and gaseous fuels used in thermal power plants. Journal of Thermal Analysis and Calorimetry 115, 903-908. (Impact Factor: 2.206).

Expert lectures/conference/seminars/workshops delivered/attended:

- Delivered an expert lecture on 'Improved Thermal Power Cycles' on June 7, 2014 during an AICTE sponsored QIP Course on 'Solar Power and Space Conditioning' at Centre for Energy Studies, IIT Delhi

## **D. Mr. Pankaj Tomar, Assistant Professor**

List of Publications:

- **P. Tomar**, R. K. Pandey, Y. Nath, Lubricating

Film Analysis in the Inlet and Work Zones at the Die/Billet Interface in Hydrostatic Extrusion of Aluminum Alloys, International Conference of Advance Research and Innovation, 1<sup>st</sup> Feb, 2014, Institution of Engineers, New Delhi-India.

- **P. Tomar**, R. K. Pandey, Y. Nath, Numerical simulation of friction in the Contact zone of wire drawing produced by direct extrusion process in presence of lubricant starvation, International Conference on Design Manufacturing, 18-20<sup>th</sup> July, 2013, IIITD & M, Kancheepuram, India.

## **E. Ms. Deepti Chhabra, Assistant Professor**

Expert lectures/conference/seminars/workshops delivered/attended:

- Attended Faculty Development Programme on "Effective Teaching" from 21-25 July 2014 "organised by IGDTUW.

## **F. Ms. Shipra Aggarwal, Assistant Professor**

Expert lectures/conference/seminars/workshops delivered/attended:

- Participated in four weeks UGC-Sponsored Orientation Programme at CPDHE, University of Delhi from Dec 8, 2014 to Jan 5, 2015.
- Participated in AICTE recognised Short Term Course on Effective Teaching conducted by NITTTR, Chandigarh at IGDTUW, Delhi from July 21, 2014 to July 25, 2014.

## **G. Mr. Vivek Chawla, Assistant Professor**

Expert lectures/conference/seminars/workshops delivered/attended:

- Organised a one day seminar on one day workshop on "3D Printing Technology" in Feb., 2015 in MAE, IGDTUW.

## **H. Ms. Deepti Jaiswal, Assistant Professor**

Expert lectures/conference/seminars/workshops delivered/attended:



- Attended an AICTE recognized short term course on Effective Teaching in IGDTUW from 21st July 2014- 25th July 2014.

## Applied Sciences and Humanities Department

### A. Dr. Ranu Gadi, Associate Professor and Head

List of Publications :

- Mohit Saxena, D.P. Singh, T Saud, **Ranu Gadi**, S Singh, S.K. Sharma, T.K. Mandal, "Study on particulate bound polycyclic aromatic hydrocarbons over Bay of Bengal in winter season", in press, Atmospheric Research (Elsevier), 145-146, 205-213, 2014 (Imp. Factor: 2.2).
- Avirup Sen , T.K. Mandal, S.K. Sharma, Mohit Saxena, N.C. Gupta, T. Saud, D.P. Singh, **Ranu Gadi**, "Chemical properties of emission from biomass fuels used in the rural sector of the western region of India", Atmospheric Environment (Elsevier), 99, 411-424, 2014. (Imp. Factor: 3.6).
- Neha Singh and **Ranu Gadi**, "Bioremediation of Zinc And Cadmium from wastewater by the nonliving biomass of Pseudomonas Oleovorans", Pollution Research, 33(1), 65-72, 2014.
- Neha Singh and **Ranu Gadi**, "Removal of Zinc and Cadmium from wastewater by the nonliving biomass of Brevundimonas Vesicularis", Pollution Research, 33(2), 419-425, 2014.
- D.P. Singh, **Ranu Gadi**, T.K. Mandal, T. Saud, M. Saxena, S.K. Sharma, "Emissions estimates of PAH from biomass fuels used in rural sector of Indo-Gangetic Plains of India", Atmospheric Environment (Elsevier), 68, 120-126, 2013. (Imp. Factor: 3.6).
- T. Saud, M. Saxena, D.P. Singh, Saraswati, Manisha Dahiya, S.K. Sharma, A. Dutta, **Ranu Gadi**, T.K. Mandal, "Spatial Variation of Chemical Constituents from the Burning

of Commonly used Biomass Fuels in Rural Areas of the Indo-Gangetic Plain (IGP), India" Atmospheric Environment (Elsevier), 71, 158-169, 2013 (Imp. Factor: 3.6).

Expert lectures/conference/seminars/workshops delivered/attended:

- Avirup Sen, T. K. Mandal, S. K. Sharma, Mohit Saxena, N. C. Gupta, T. Saud, D. P. Singh, **Ranu Gadi**, "Chemical properties of emission from biomass fuels used in the rural sector of the western region of India", 18th National Space Science Symposium, 29 Jan-1 Feb 2014 (NSSS), Dibrugarh University, Assam.
- T. Saud, T.K.Mandal, **Ranu Gadi**, "Assessment of residential biomass burning emission in India and potential climate forcing impact", Changing Chemistry in Changing Climate (C4): Monsoon, 2013, 1-3 May, IITM, Pune.

### B. Dr. Chhaya Ravikant, Associate Professor

Research Achievements:

Ph.D Thesis awarded under her supervision

- Mr. Kuldeep, "Optical Properties of Cesium Halide thin films", in 2015
- Mr. Vidya Sagar, "Development and Parametric studies on Arc Plasmas, in 2015

Expert lectures/conference/seminars/workshops delivered/attended:

- Attended a FDP on Effective Teaching, 21/7/2014- 25/7/2014 organised by National Institute of Technical Teachers Training and Research, Chandigarh.
- Attended FDP on "Recent Trends in Big Data and Cloud Computing" from 16 Dec-20 Dec2013 at IGDTUW, Delhi.

## STUDENT'S TRIUMPH

*If faculty is the mind of an academic institution then the students are its heart. The vibrancy, enthusiasm and dynamism of our students is beyond imagination. Year after year they outdo themselves, treading unbeaten paths and breaking yet unbroken milestones; needless to say IGDTUW is extremely proud of its students and believes that one day they will make the entire nation proud.*

### CSE Department

1. Students from M.Tech.(MPC 4<sup>th</sup>Sem) *Ankita Gulati, Fatima Motiwala* secured 2nd rank in ARM design Contest held on 9<sup>th</sup> Jan 2015 at Bangalore for project titled, *RFID based shopping assistant for differently abled*.
2. Students from M.Tech (MPC 4<sup>TH</sup>Sem) have been selected as one of the top 10 groups of Atmel Design Contest for project titled, *Wireless based heartbeat monitoring of multiple patients*.
3. Students from first year *Ankita Sharma, Raunak Jain, and Supriya Bhalotia* were part of the Team Rahnuma- 2014 (Street Play Society of IGDTUW) which secured first position at VIPS and IIT, Kharagpur, second position at FORE School of Business and third position at BITS Pilani's Cultural Fest, Oasis.
4. Two teams of four each, from second year with team members *Aashita Bansal, Bhawna Shemar, Megha Goyal, Namrata Gupta, Paridhi Gupta, Shivangi Jha, Suruchi Jain and Tanu Mehrotra* cleared the first two rounds of E- yantra, a robotics competition organized by IIT Bombay.
5. A team of three students, *Himani Garg, Megha Agarwal, and Tivisha Goyal* secured first rank *nationwide* in the first round of a programming competition organized by IEEE Women in Engineering.
6. *Srishti Marwah*, a student of third year won her second Gold Medal in the 16th Asian Roller Hockey Championship held at Haining, China in September 2014. She also participated in Ladies World Roller Hockey Championship held at Tourcoing, France in October 2014.
7. Anshul Mehra, a student of third year designed the logo of IGDTUW and won a cash prize of INR 5000.
8. *Preeti Gaur*, a student of fourth year got selected for Personal Interview in Roadies XI out of 14,000 contestants at All India Level. She also won Gold Medal at the Devil's Circuit, 5 km obstacle race.
9. *Maanya Gupta*, a student of fourth year got selected for the WIE Tech Mentorship by IIIE. She also founded the technical blog of CSI-IGDTUW and the latest feather in her cap is the final selection at IIM Ahmedabad for higher studies.
10. A team of two students *Kajal Gaur and Divya Jain* presented a technical Paper based on 'Best fare App' which was selected in a conference as the second best research paper.
11. A team of three students from fourth year *Prachi, Ashna, and Isha* wrote a technical paper on Windows Phone Mobile Application- Toytown which was selected by CEIT and IJETAE. They also developed a mobile app which was awarded third prize by Nokia and got Nokia Asha as a gift.
12. *Swar Gujrania*, a Bharatnatyam dancer from fourth year was a part of a performance tour



which included pre-launch shoot by a Tamil TV Channel.

13. *Timila Garg*, a student of fourth year was a part of Shell Eco Marathon.

## ECE Department

1. A team of students took part in Inspiralon, a robotics event of *Kshitij'14*, the annual tech fest of IIT Kharagpur. The team qualified for the finals (top ten) out of 250 teams. They not only won the award of Best Mechanical Design for their robot but their robot also got selected to be exhibited all over India.
2. A team of seven students, *Somya Tuteja, Ankita Rathi, Shalu Vashisth, Shilpa Sahoo, Divya Tanwani*, of ECE 3rd Year and *Aashvi Singla and Shrishty Dua* of ECE 2nd year participated in the line follower robotics competition of *Innovate'14*, the annual technical fest of SRM Delhi NCR. Their team was placed 2nd in the competition and was given a cash prize of Rs. 3000.
3. Team Robolution participated in the Asia-Pacific Robot Contest (ABU Robocon) 2014, Pune. The competition saw the participation of 89 teams from Asia Pacific Region in 2014.
5. A team of five students of ECE 3rd year, namely, *Parinita Aggarwal, Nitya Khanna, Parul Sharma, Shriya Gambhir and Reetika Anand* participated in Global Space Balloon Challenge. The event was organised by MIT, Stanford University and Michigan University.
7. A team of students participated in Student Professional Development Conference organized by American Society of Mechanical Engineers (ASME) Chapter of BITS Pilani. They designed a quad copter for the Student
8. Design Competition, making it the first unmanned air vehicle designed at IGDTUW.
9. A team of two students, *Khushbu Dhingra and Tanya Adhlakha*, participated in the IEEE WIE Delhi Section Quiz on Women's personalities and bagged the first position. This event was organized by IEEE NSIT Chapter.
10. Three students, *Pooja Malhiyan, Neha Chaudhary and Avi Goswami* successfully published their technical paper in *ICRITO'14* (International Conference on Reliability, Infocom Technologies and Optimization) and in the online digital library of IEEE Xplore.
11. *Tanya Adlakha* of ECE 3rd year, along with two other students of different colleges, participated in an electronics event, *Electrocution* organised by troika DTU on 15th February, 14 and secured second position. They were given a cash prize of Rs 2000 along with an appreciation certificate.

## IT Department

1. *Tanvi Malhotra and Niharika Kohli* qualified for the preliminary round of ACM ICPC contest, the world's largest programming contest held annually.
2. Raveen Dayani ranked amongst top 723 out of 24,000 participants in TCS Codevita, an annual national level programming contest organized by TCS. *Lakshya Bansal, Gunjan Malik & Oshin Maini* qualified for round two of the same contest.
3. *Mohini Agarwal, Pooja Sinha & Gunjan Malik*, qualified for the final round of Microsoft Hackcon, which is a national level hacking event.
4. *Pooja Sinha* qualified for Microsoft Build the Shield, which is the first hacking event from Microsoft at national level.

5. *Raveen Dayani* successfully cleared the qualifying round of Facebook Hacker Cup, an extremely competitive programming contest.
  6. *Oshin Maini*, qualified for Google Code Jam, which is a programming contest, testing algorithmic skills.
  7. *Neha Mittal*, MTech (ISM) was awarded the first prize with Rs.5000/- cash prize in Technical Paper Presentation at Tech Fest of Delhi University, 2015.
  8. *Dilpreet Kaur, Priti Maurya and Nidhi Aggarwal* designed the Online Admission Portal for M.Tech. & Ph.D. admissions 2014 and also developed an application for e-Admit Card generation for the University Examinations.
- colleges from all over the country took part, was held from the 19<sup>th</sup> to the 25<sup>th</sup> of January, 2015. With the distinction of being the only all girls team in the entire competition, Aious Formula Student team cleared the Technical Inspection, the Tilt Test, the Noise Test, and the Brake Test, and qualified for the Endurance Race, a feat accomplished by only 7 teams in the entire competition. The team also received a Special Mention award for competing and reaching a level that even experienced teams had found difficult to achieve.
2. Team Yantriki participated in SAE BAJA 2014 and was awarded the Chairman's award of one lakh rupees from BAJA for its effort and all round performance at the event.

## MAE Department

1. *Aious Formula Student*, the official formula team of IGDTUW, under the guidance of Mr.Vivek Chawla, Asst Professor, Dept of MAE successfully participated in the International Formula Design Challenge 2015, held at Kari Motor Speedway, Chettipalayam, and Comibatore. The competition, in which



# SCHOLASTIC & DEPARTMENTAL ACHIEVEMENTS

IGDTUW currently has five departments namely, Computer Science & Engineering, Electronics & Communication, Information Technology , Mechanical and Applied Sciences & Humanities which are successfully offering different programs like B.Tech, M.Tech, MCA and Ph.D . Apart from regular academic courses all the departments keep conducting Faculty Development Programmes, Student Development Workshops, Expert Guest Lectures, Industry Collaborated Sessions, Short Term Training Courses etc. To know more about these activities, please read on!

## CSE Department

- M.Tech in Mobile and Pervasive Computing was started in August' 2013 with an intake of 30 students. AICTE scholarship has been granted to GATE qualified students admitted in M.tech, MPC course.
- 80 new computers have been allocated to CSE department and have been installed in labs.
- Two Patent applications have been filed, titled "*A system for building, customizing software and hardware interfaces of smartphone.*" and "*Soil multi-parameters remote monitoring and alerting system.*"
- CSE Department bagged a 23.40 lakhs INR Project grant from Microsoft for project titled, "*MySmartPhone MEK-3*".
- The department received 54,000 INR Project grant from Intel for Intel IoT Project.
- Lab E-107 was renovated and inaugurated by Honourable VC, IGDTUW, Prof. Nupur Prakash on 13<sup>th</sup> May 2014.This lab aims to provide students the ability to design and innovate new projects/ devices and to provide end to end solutions to society and industry by implementing new projects and ideas.

Poster presentation from M.Tech (MPC) students :-On 13<sup>th</sup> May, judged by Prof. M. Balakrishnan and Prof. PVM Rao From IITD. Best five posters were selected and awarded with certificates.

- A two days workshop was organized for creating interest among student in emerging fields

like embedded system by providing hands on experience on microcontroller 8051 based circuits and assembly language programming.

- A six weeks summer training workshop was organized on "Mobile Architecture and Programming by using j2me (Asha OS), Nokia X (Android), Python & Linux (Raspberry Pi)" from 16<sup>th</sup> June 2014 to 25<sup>th</sup> July 2014. 41 students from different colleges participated and learnt various aspects of latest software and hardware techniques. Best three groups were selected and awarded with certificates and Nokia Phones which included Lumia, Asha, Nokia X.
- A Seminar and Workshop on Competitive Programming was conducted by the department.

A team from CodeChef- A DirectI Initiative, Mr. Anup Kalbalia and Mr. Suraj Sharma visited IGDTUW on August 27, 2014 to conduct a hands-on session on solving problems at [www.codechef.com](http://www.codechef.com). They also discussed with students how competitive programming can boost their career prospects and help in developing their skills. The event saw a huge participation with 300+



students attending the event.

- An International Conference on Data Mining and Intelligent Computing, was organized by IGDTUW on 5<sup>th</sup> and 6<sup>th</sup> September' 2014. The Conference was technically co-sponsored by IEEE. The conference received active participation from 10 different countries. The best papers of the conference have been included in IEEE Xplore digital library.
- A workshop was organized on cloud computing for faculty members and M. Tech MPC students by NITTTR.
- A one day hands-on workshop was organized on Internet of Things on 1st march 2015 in sponsorship with Intel. 150 students from various colleges participated and learnt Intel



Galileo gen 2 hands-on.

- Two groups comprising seven students each from B.Tech and M.Tech have been selected to present their project ideas in the coming ADCOM conference to be held at Bangaluru. Their project ideas have been selected through ARM project contest. Some more students have also applied for some more project contests like ATMEL, INTEL etc.
- Workshop on Becoming a Linux Kernel Hacker was organized by Tapasweni Pathak, an alumnus of our college, to introduce girls to the open source world. She is currently working as an

intern with The Linux Foundation. The workshop effectively guided the attendants on how to submit Linux patches and get paid for it. They learned using Git. They were also told about the Outreachy Programme and GSoc.

## ECE Department

- SMDP project

IGDTUW has been included in the Special Manpower Development Programme phase III (Chip to System) of Department of Electronics and Information Technology, Ministry of Communications & Information Technology. The present proposal has selected 60 institutions and includes all IITs, all NITs, 3 IIITs and other institutions which participated in SMDP-II, Societies of DeitY and Indira Gandhi Technical University for Women, Delhi.

The Special Manpower Development Program for Chips to System has number of deliverables – from specialised manpower development to design of ASICs / System on Chip(SoC) / Systems / Sub-system design etc. In particular it is expected that the program will result in development of more than 50,000 of specialised manpower who can take up VLSI designing in the country. Most of this trained manpower will be industry ready.

- Seminar/Lecture Series

The department has started a Seminar/Lecture Series to encourage the undergraduate, postgraduate students and Faculty for innovation, research and updating themselves towards the latest technologies. The Expert Lectures would be from renowned academicians and presentations would be given by industry experts in hardware. As a part of this series, one industry lecture has already been conducted on 16th February 2015.

- PhD Programme

The Department of Electronics and Communication successfully launched the Ph.D programme which commenced in the year 2014. We have two full time Ph.D scholars namely, Ms. Neha Singhal, gold



medallist from UPTU and Ms. Deepti Aggarwal from IIT Delhi along with a part time Ph.D scholar, Mr. Ram Naresh from NIT Kurukshetra.

Ms. Neha Singhal and Ms. Deepti Aggarwal are doing their Ph.D in “Free Space Optics” while Mr. Ram Naresh is pursuing his Ph.D in “Cognitive Radio”.

- M.Tech Achievements

IGDTUW is proud to announce that AICTE Scholarship is now granted to GATE qualified candidates admitted to various M.Tech Programs.

#### Student Presentations

- Prerna, Vandana Nirajan (2015) Analog Multiplier Using DT莫斯CCII Suitable For Biomedical Application In: IEEE International Conference on Computing, Communication and Automation(ICCCA) Galgotias University, Greater Noida, India.
- Sonal Aron, Shelly Garg, Vandana Nirajan (2015) PFAL based Power efficient Mux based Decoder In: IEEE International Conference on Computing, Communication and Automation(ICCCA) Galgotias University, Greater Noida, India.
- Shelly Garg, Vandana Nirajan (2015) A new low voltage highly linear FVFSC Current Mirror In: IEEE International Conference on Computing, Communication and Automation(ICCCA) Galgotias University, Greater Noida, India.
- Akanksha Singh, Vandana Nirajan, Ashwani Kumar (2015) A novel technique to achieve high bandwidth at low supply voltage In: IEEE The International Conference on Computational intelligence and communication technology (CICT) ABES Engineering College, Ghaziabad, India.
- Shelly Garg, Geetika Chaudhary, Vandana Nirajan, Ashwani Kumar (2014) Bandwidth

Extension of Voltage Follower using DT莫斯 transistor In: IEEE International Conference on Innovative Applications of Computational Intelligence on Power, Energy and Controls with their impact on Humanity(CIPECH) Krishna Institute of Engineering and Technology Ghaziabad, INDIA.

- Ankita Deo, Vandana Nirajan, Ashwani Kumar (2014) Improving gain of ClassE amplifier using DT莫斯 for biomedical devices In: IEEE International Conference on Medical Imaging, mhealth & Emerging Communications Systems(MEDCOM) G.L.Bajaj Institute of Technology and Management Greater Noida,INDIA.
- Priya Meharde, Vandana Nirajan, Ashwani Kumar (2014) Low Voltage CMOS Active Inductor with Bandwidth and Linearity Improvement In: International Symposium on Electronic System Design(ISED) National Institute of Technology Karnataka, India.

#### Trainings undertaken

- Akanksha Singh participated in a Training Program on “Programming using VHDL on FPGA” at Dept. of Electrical Engineering, IIT Delhi for 8 weeks.
- Pooja Verma, participated in a Training Program on “Verilog for FPGA designing of Data” at C-DOT, Delhi Acquisition circuit of Optical time domain reflectometer for seven weeks.
- Reshma Sinha & Shuchita Kaila participated in a Training Program on “System Verilog” at DKOP Labs (Corporate partner of Foundation for Innovation and Technology Transfer, IIT Delhi) for 6 weeks.

DeitY's Project: Specialised Manpower in Area of VLSI Design

A Proposal submitted to the Govt of India, Dept. of Electronics and Information Technology,

for Capacity building & Human Resource development in the area of VLSI Design” at IGDTUW is under consideration. The distinctive features of this project are:

- Setting up of VLSI lab providing the hardware platform and EDA tools
- Instruction Enhancement Programs for faculty
- Knowledge exchange and networked Ph.D programme
- Implementation of design projects
- Fabrication of ICs/ASICs developed in the Lab

## IT Department

- Under the aegis of the scheme, “IP Awareness Programme for E&IT Sector”, a one day Workshop on “IPR (Intellectual Property Rights) Awareness”, sponsored by Dept. of Electronics & IT (DeitY) was organized by IT Department in collaboration of the Research Wing at IGDTUW on 26<sup>th</sup> September 2014.

The Following experts were invited as resource persons.

- Dr. A. K. Garg, Ad. Director, DeitY, Gol.
- Mr. R. Saha, Senior Advisor, CII.
- Mr. K. Pradeep, Registered Patent Expert, The Intellectual Edge.
- Mr. Yashwant Dev Panwar, Scientist-E, TIFAC.
- Ms. Sheetal Pandey, Patent Engineer, C-DAC.
- Dr. A. K. Mittal, Professor, MHRD, IPR Chair, IIT, Kanpur.

The workshop had an overwhelming response from people from academia and

research with more than 80 participants from NCR including all students of M.Tech (ISM) who attended the event.

- The university’s first International Conference on the topic of “Data Mining and Intelligent Computing” was co-organized by Department of Information Technology and Department of Computer Science and Engineering at IGDTUW on 5<sup>th</sup> – 6<sup>th</sup> Sept. 2014. Data mining, the key enabling technology of the Conference was the core underlying technique that enables the IT applications with actionable intelligence and knowledge. While Data Mining evolves with innovative learning, algorithms and knowledge discovery techniques, Intelligent Computing is employed in harnessing the mined results more efficiently. The purpose of this conference was to promote scientific interchange among researchers and practitioners in all areas of Data Mining and Intelligent Computing and their implementation in our daily life.

Keeping in view the current trends, the Conference focused upon following key areas:-

- Data mining and data warehouse
- Databases and information systems integration



- Artificial intelligence and decision support systems
- Information systems analysis and specification
- Human factor and social issues
- Methods and algorithms

Researchers from industry as well as other universities were invited to present their research work in the above areas. Graduate students from M.Tech. (Information Security Management) and PhD scholars attended the Conference.

- One Day Workshop on “Cloud Computing and Bluemix” was conducted by IBM on 22<sup>nd</sup> January, 2015. More than 80 students from M.Tech.(ISM), M.C.A. and Research Scholars attended the workshop.
- To contribute to the campaign of making India as Digital India for better governance, Department of IT is starting one year trimester based Post Graduate Diploma Program in e-Governance, in collaboration with NIELIT (National Institute of Electronics and Information Technology), in the next academic year commencing from July 2015. The overall objective of the program is to prepare the participants to play an effective support role in the conceptualization, design and implementation of e-Governance projects and to develop broad strategies for implementing the e-Government programs at the state and country level. The course curriculum of this program is designed by experts from IGDTUW in consultation with senior academicians, professionals from IT industry and officials from various government departments, who have a vast experience in designing and implementing e-Governance projects. While designing the curriculum, full consideration has been given to the practical aspects and hands



on training, so that the participants can learn to implement the basic and advanced technological concepts during their lab sessions. After two trimesters, participants will be working on a real life e-Governance implementation project in any Government department, Institute, Industry or any Public Sector Organization. The programme is being coordinated under the leadership of Dr. Amar Mohapatra.

- It was the initiative of the Department of IT that led to the signing of an MOU with ICICI Bank under ICICI Trinity Programme to leverage the innovation potential of the youth. The programme consists of three main stages – Ideate, Prototype & Be an entrepreneur. Through this programme, an opportunity is given to the students to showcase their innovative ideas to industry veterans and turn them into reality. 170+ ideas were submitted from 22 institutes across India, 8 ideas were shortlisted, out of which 3 ideas were chosen from Department of IT.
- The Department of IT is planning to start M. Tech (IT) Part-time Programme for working professionals with an intake of 40 students. This program is flexible to make it convenient for the working professionals in Delhi/NCR area to pursue an advanced degree at IGDTUW, who can attend classes at the University while being employed.

- The Department of IT has proposed to establish a new Distributed Computing and Cyber Forensic Lab which will be equipped with latest configuration machines and various Open Source and Licensed software & software forensic kits. Experiments related to studying, analyzing, and improving large scale distributed systems, by focusing in areas such as Internet traffic monitoring, Internet Safety, Peer-to-peer systems, GRID Computing, Big Data Analytics etc. will be conducted.
- The Department of IT designed a software application for “Generation of e-Admit Card” for University Examinations under the leadership of Prof. R K Singh.
- The Department of IT has developed the “Online Admission Portal” for Ph.D and M.Tech admissions to the University for the session 2014-2015 under the guidance of Dr. Rajni Jindal (then HOD-IT) and Aruna Bhat.

## **MAE Department**

- MAE Department organised a workshop in April, 2013 on Gearboxes by PAT consultants. It was conducted by Mr. Anoop Srinivasan, judge for BAJA SAE India. 8 different types of gearboxes were opened and their working mechanisms were explained. The workshop saw participation from 16 colleges across Delhi NCR.
- The mechanical department in collaboration with Cognizance, the annual technomanagement fest of IIT ROORKEE, conducted the zonal rounds of their festival events at the IGDTUW campus. Multiple quizzes, robotics events and workshops were conducted at IGDTUW. The event saw participation from over 35 colleges across Delhi - NCR.
- Workshop on ANSYS and SOLIDWORKS was conducted by Go4Tech on 15-16 Feb,2014. A total of 100 students from 9 colleges took

part in both of these workshops.

- Scholarship test by TIMES and Trump and Gates was conducted for all the students of IGDTUW under Xebec, the annual technical fest hosted by Mechanical and Automation Department.
- LEAN IN | MECHANICAL ENGINEERS chapter, the world's first chapter for women mechanical engineers conducted India's first LEAN IN event at Xebec., 2015
- PhD Programme

The Department of Mechanical and Automation successfully launched the Ph.D programme which commenced in the year 2014.

### • M.Tech Achievements

IGDTUW is proud to announce that AICTE Scholarship is now granted to GATE qualified candidates admitted to various M.Tech Programs

- The department has upgraded the Measurement and Control Lab which is a core course of third year students. Welding and Foundry facility have also been successfully developed in the workshop. The department has also developed the RAC lab.

## **Applied Sciences and Humanities Department**

- The department of Applied Sciences and Humanities, IGDTUW organized a 5-day Faculty Development Programme on “Effective Teaching” in collaboration with National Institute of Technical Teaching Training and Research, Chandigarh for all the faculty members of the University.

The FDP was scheduled from 21<sup>st</sup>-25<sup>th</sup> July 2014 at Seminar Hall, Administrative Block of IGDTUW from 9.30 AM to 5 PM. The Programme aimed at equipping the faculty





members with requisite knowledge and skills to enhance their competence in imparting education and make teaching-learning process more enriching and effective.

The course of "Effective Teaching" had been designed for faculty of technical institutions and aimed at developing in them requisite knowledge and skills for planning and delivering teaching effectively. The contents of the course were: Dimensions of Effective Teaching, Planning for effective teaching (instructional objectives, selection of appropriate methods and media), Skills for effective delivery (motivating students, classroom communication, student involvement) and Evaluation and feedback.

The Eminent speakers were Dr. M.P. Poonia, Director-NITTTR, Chandigarh, Prof. Sunil Dutt, Prof. S.P. Bedi and Er. T.N. Thukral from Education and Educational Management Department, NITTTR, Chandigarh.

- An expert lecture was organized by the Department of Applied Sciences, IGDTU on 12th Sept., 2013. The talk was delivered by Mr. Pankaj Rai Jain, Managing Director and Partner, Accenture, on "Emerging Technologies in IT industry". He talked about how technology has changed the world in the last two decades. The talk was followed by an interactive session with the students

and the faculty members. All the students benefited from the experience and guidance of the expert.

- An expert session on "Organ Donation" was organized in March 2014 for the students and faculty members of IGDTUW. An expert lecture was delivered by Ms. Pallavi Kumar, Executive Director MOHAN (Multi Organ Harvesting Aid Network) Foundation. The session covered key issues like need for organ donation, current statistics on end stage organ failure, organ donation rate, brain death, legal aspects of organ donation



and myths around organ donation.

Few queries like whether organs could be preserved, how to pledge your organs, which organs could be donated while a person is alive were dealt in a professional manner.

## BEYOND THE CLASSROOM

The students at IGDTUW excel both in academics and extracurricular activities. They are provided with multiple opportunities to participate in and organise several events and activities under the aegis of different clubs and societies. This environment which is a combination of both fun and learning enables our students to develop into holistic and well groomed personalities.

### CSI IGDTUW

- CSI-IGDTUW in association with APPIN TECHNOLOGY LAB, GTB NAGAR organized a seminar on embedded systems and robotics on October 17, 2014.

- Workshop on Game Development by Hackveda

CSI-IGDTUW Student branch in collaboration with Hackveda organized an “Android Game Development Workshop using C++ and Java programming language” on November 15 and 16, 2014. The highlights of the workshop by professionals at Hackveda were:



- 100% Practical sessions
- Video recording of the sessions were given
- Operating System based, all required software' pre-installed toolkit was provided in advance to ensure learning by practicals.
- Learning Management Software was used to ensure that every student is able to ask live queries to the trainer, can answer the questions asked by the trainer, provide instant feedback and can view live notes uploaded by the trainer. This program ensured 100% learning for every student who attended the workshop.

- American national accreditation board based Certified Game Developers Level- 1 Certificate and free 1 year query membership for technical queries related to the topic was provided to all the students.

### IEEE IGDTUW

#### Industrial visit

A group of thirty nine students of ECE 3rd year, accompanied by two faculty members, Mr. AkashTayal and Ms. Nidhi visited the ERTL North (Electronics Regional Test Laboratory) Campus on **29th September, 2014**. The industrial visit provided the students with an opportunity to see the working of industrial equipments in running conditions.

#### IEEE Day celebrations

IEEE Day is a global event that is held annually on the first Tuesday of October. To commemorate this day, the IEEE IGDTUW Student Branch held a robotics





workshop on 7<sup>th</sup> October, 2014. The students got a hands on experience of how to build a line follower robot. The workshop saw participation from students of various years and branches.

#### **Children's Day celebrations**

IEEE IGDTUW celebrated Children's Day on 14<sup>th</sup> November, 2014 with the children of the Kilkari Home for Girls. They were given books, school bags and games.

#### **The IEEE Orientation and Membership Drive**

IEEE IGDTUW successfully conducted the Orientation on 17 November, 2014. The orientation aimed at giving an outline as to what IEEE is and how we as students will benefit by being a member of the student branch of such a prestigious organization. 55 new members became a part of IEEE IGDTUW Chapter.

#### **Embedded system Workshop**

To provide an insight into Embedded Systems and their real world applications, a two hour workshop on the same was organized on 19<sup>th</sup> November, 2014 in association with Sofcon group. The workshop was attended by 78 students.

#### **Delhi Student's Congress**

Five IEEE members, Nitya Khanna, Shivani Batra, Amitoj Kaur Chawla, Khushbu Dhingra, Deepa Dabas and Anisha Suri represented IEEE IGDTUW at the Delhi Student Congress, 2015, held at Delhi Technological University from 10th January to 11th January, 2015.

#### **SIG On Embedded Systems**

An SIG on Embedded Systems was formed by the IEEE IGDTUW Student Chapter this year. Under the SIG, students are taught about the basics of Embedded Systems using an Arduino as the platform.

#### **IEEE WEEK**

##### **1. IEEE SPECTRUM DISCUSSION (14th January, 2015)**

The IEEE week commenced with the discussion of the IEEE spectrum magazine (December edition). The topics which were discussed were LiFi, Wax Rocket and the newly emerging gadgets. An active participation was witnessed and the session ended on an enthusiastic note.

##### **1. DOCUMENTARY SCREENING (15th January, 2015)**

On the second day of IEEE week, the documentary screening of Wright Brothers' Flying Machine took place. The 30 minute documentary profiled the ground breaking day in the history of aviation.

##### **2. SPARSH ORIENTATION (16th January, 2015)**

The event was attended by Mr. Robin of Aman Saathi, an NGO which works in collaboration with the IEEE IGDTUW Student Chapter in this program. Mr. Robin briefed the students about the objectives of the program and



encouraged students to volunteer.

### 3. BRANDWAGON (19th January, 2015)

Under this event, the participants were shown a series of brand logos and taglines and they had to identify the brand associated with them. This event saw an enthusiastic participation of 26 students from 1<sup>st</sup> and 2<sup>nd</sup> year.

### 4. BRICK RACE (20th January, 2015)

Under this event, one person was to place the brick; the other one was to walk on the brick laid, to cover a given distance in minimum time. This event was huge hit among students.

### 5. CODE-A-CLUE (21st January, 2015)

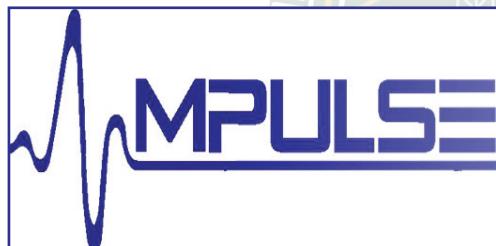
The sixth event of the IEEE Week was Code-A-Clue. The event entailed decoding the answers to the questions to get the clue to the next question. There were three rounds to clear and the first team to answer the third question won.

### 6. TREASURE HUNT (22nd January, 2015)

The IEEE Week ended with an event which is most treasured by students, "The Treasure Hunt". The minimum number of students needed to form a team was three and the maximum number of students allowed in a team was six. Eight teams registered for the event. The participants were given a series of clues to find different locations and at the last spot they had to solve a circuit question.

## Entrepreneurship Awareness Drive

The Entrepreneurship Development Cell (EDC) of IGDTUW, in association with EDC of NIT Trichy and IGDTUW IEEE organized an entrepreneurship awareness drive, 'ENLIGHTEN', on 6th February, 2015 as part of the Entrepreneurship Summit 2015. The students were addressed by the CEO of Outline India, Prerna Mukhriya who recounted her own journey of becoming an entrepreneur.



## The logo league

The IEEE IGDTUW Student Chapter held The Logo League, a Logo Design Competition to design and launch the official logo of Impulse, the annual technical fest of IEEE IGDTUW.

## Mentoring Women's Engineering(MWE)

The IGDTUW WIE launched an initiative, MWE, Mentoring Women Engineers, to assist future women engineers in becoming the leaders of tomorrow. Students are assigned mentors with similar goals as themselves, with whom they can interact and get valuable advice and tips on projects, placements, interviews and entrances. The orientation for the same was organized on **12th February, 2015** and the students were introduced to their mentors.



## Chipko movement

The IEEE IGDTUW Student Chapter organized the event, Chipko Movement on **13th February, 2015**. This event was organized in association with Catharsis, the combined Eco fest of IGDTUW and AIACTR. The event saw an enthusiastic participation of 13 teams from both colleges, IGDTUW and AIACTR.



### **Grant- A-Wish**

The -WIE IGDTUW Student Chapter organized “Grant A Wish” donation drive in the college premises from **16th to 17th February, 2015**, to collect books, clothes and other essential day to day items for the underprivileged and needful children of the Kilkari Home for Girls, Kashmere Gate.

### **ACM Chapter IGDTUW**

- An Expert Lecture on “Research Issues in Computer Security”, 11th February, 2015 by Dr. Debin Gao (PhD from CMU), Assistant Professor, Singapore Management University was delivered.
- Expert Lectures on “Research in Information Security”, 25th September, 2014 by Dr. Ponnurangam Kumaraguru and Dr. Sambuddho Chakravarty, Assistant Professors, IIIT, Delhi were arranged for students.
- An Expert Lecture on “Latest Database Technology – Case Study: Oracle Database 11g”, 13th August, 2014 by Oracle Certified Professional & Regional Domain Expert, NIIT was conducted.
- A Workshop on “Web Application Vulnerabilities”, 17th October, 2014 by Security Researchers at Open Security Alliance and Active Volunteer at NULL Security Group was organized.

### **ASME Chapter IGDTUW**

Recently ASME Chapter of IGDTUW has been chosen by the leadership of ASME for the Outstanding Student Start-up section grant which includes cash grant of 500 USD.

A two hour seminar was organised by the ASME Student Chapter under the guidance of Mr. Vivek Chawla, faculty advisor-ASME &Dr N.R Chauhan, HOD MAE on 3D printing technology in the university premises. The seminar was presided by Mr. Priyam Saxena, CEO, PAT- Print Any Think along with his team. University students attended the seminar in large number. The students were enlightened about the 3D printing technology, a comparative study between the 2D printing and 3D printing technology was also done. The procedure of rapid prototyping, from the CAD modelling of the design to actual production was discussed. The students witnessed the process of 3D printing and could comprehend the working of the machine. Students were acquainted with the working principle of the machine, polymer used, material of various components of the machine, the capacity in which the machine can produce a component and the time taken for production. They were briefed about the possible scope of research and development in the arena of 3D printing technology. Usage of the printing machine in the industry was also discussed.



A tutorial on CAD designing was also conducted which was followed by a designing activity. The activity encouraged students to come up with new designs and ideas that could be implemented in our daily cores. Innovative and reasonable designs were highly appreciated by the PAT team. On the similar lines the students were made to work on a problem statement to enable applicative technical thinking. It was an enlightening and knowledgeable session for the students.

## SAE BAJA

The biggest All-Terrain Vehicle (ATV) extravaganza of the country, BAJA SAEINDIA 2014 was successfully conducted in Indore, Madhya Pradesh. Competing in this event that witnessed 120 teams from across the length and breadth of the country, battling it out to make their respective self fabricated ATVs win, was the cohort, called *Yantri* from Indira Gandhi Delhi Technical University for Women, representing the city of Delhi and girl power for the sixth time consecutively. The event kicked off with the registration of the vehicle and the team of *Yantri* at the event, and quickly proceeded to the next round of technical inspection.



The all important tri-segment technical inspection was cleared by the team successfully followed by dynamic events at the venue, which comprised of events such as acceleration test, hill climb, manoeuvrability test

and the most enthralling new addition in the artillery of BAJA SAEINDIA, the traction round. The most successful of these were hill climb and acceleration events where the team achieved appreciable performances in their first attempt only, which was even improved in their respective second tries. The team also had the opportunity to present their vehicle design and project cost report in front of various dignitaries from the field of automobiles which was then scrutinized by the experts.



The competition eventually blossomed to its fullest with the most exciting round of the event, *the four hour endurance race* amongst all the qualified teams. The adrenaline rush and the off road heart flared at its peak with all the cars

in the battleground and the most unexpected terrains in place to test the suspension, steering, chassis and other system of the cars. The team fared well in spite of a few breakdowns during the 4-hour ride. The final ranks were declared, and team *Yantri* was up by 29 ranks from the last year to an overall rank of 56 among 120 participating teams this time. The awards ceremony ended the journey on a high for the team, as it grabbed the Chairman's award of One lakh rupees from BAJA for its effort and all round performance at the event. In addition to the compliments received by the team from their numerous competitors for having made a remarkable progress compared to the last year, various eminent persons from the organizing committee of the event and the chairman of BAJA SAEINDIA applauded the efforts made by the all-girls team from Delhi. The entire team and the faculty advisor were felicitated by Prof Nupur Prakash, Vice-Chancellor of IGDTUW on 21 March, 2014. The VC appreciated the efforts of the entire team and reiterated her hopes from the students of the University by saying that they should continue to bring laurels to the University.

## SUPRA SAE

Supra SAE India is an inter-college competition organized by SAE India in which the student teams have to formulate, model and fabricate a prototype race car for a non-professional weekend race. Aious Formula Student Team, representing Indira Gandhi Delhi Technical University for Women, participated in the event held in Madras Motor Sports Track at Chennai in July 2014 and was ranked 2nd out of participating 170 teams in the Virtual round.

The team consisted of 22 diligent students from Mechanical and Automation Engineering and 2 students from Electronics and Communication Engineering Department. Named as Irya, this was the third car from Aious Formula Student team. The car was fabricated in the college machine shop by the members. The individual



components were manufactured with precision and accuracy. Each component was then assembled together meticulously to produce the vehicle.

Supra SAE India 2014 was an enriching and an inspiring experience. Working in a team, the members learnt how to put to use the engineering abilities, knowledge and hard work and to convert information into a practicable idea. Apart from understanding the working and the function of each component, their manufacturing processes and cost requirements were also studied. The members also developed managerial skills; to coordinate among different Departments, to manage the procurement of materials, to divide time among different tasks and set priorities and to troubleshoot the difficulties faced.



## TECHNOLITERATI

Technoliterati is the Literary Society of IGDTUW, which under the guidance of Dr. Kalpana Yadav as Faculty Advisor, aims at the amalgamation of creativity and talent of IGDTUW students in literary endeavours. The faculty coordinator of the society, Dr. Bhavya, along with Mr. Akash Tayal, Mr. Rishabh Kaushal, Ms. Deepti Chabbhra, Ms. Smita Kapur and Mr. Dhanjay Yadav, make sure that the students get ample opportunities to allow their creative and literary talents to move in the desired direction. The society inspires young budding engineers to open up their minds and allow their imagination to fly high. In other words, the students under the aegis of this literary society are encouraged to write candidly, speak fluently and express freely. The society motivates the students to contribute articles of different genres, for the college magazine 'Mindscapes' and actively participate in all the events that the society organizes.

### Spell Bee

A spell bee competition was held at IGDTUW on 17th October 2014. The event gave everyone a chance to test their spelling prowess, and bring their inner wordsmiths to the fore. Conducted in two simple elimination rounds, the spell bee attracted massive participation; one of the reasons for this being chocolates as prizes. The winners were:

First Prize: Prerna Pahuja, CSE, 1st year

Second Prize: Pratibha Arya, MCA, 1st year

Third Prize: Sukriti Sehgal, CSE, 2nd year and Arushi Butan, CSE, 1st year

### Formal Debate

A conventional debate was organized on 18th November 2014, on the motion – '*This house believes that torture is justified when used for national security*'. The event gave everyone a chance to test their debating prowess, and hone their reasoning and argumentative skills. Speakers were invited in teams of two, one speaking for the motion and the other against. Each speaker got 3 minutes to present their arguments cogently and persuasively. The event was judged by Dr. Bhavya Raj, Faculty Coordinator of Technoliterati and the debate attracted massive participation of 11 teams. The winners were:

Best Team: Meghna Acharjee, MCA, 1st year & Shavya



Aggarwal, MCA, 1st year

Best Speaker (For): Meghna Acharjee, MCA, 1rd year

Best Speaker (Against): Aditi Sangar, ECE, 2nd year

### Events during Taaranagana'15

Technoliterati, in collaboration with the HeForShe Campaign of UN Women, as a part of Taaranagana, organised two literary events: *War of the Words*, which was a formal debate, and *Out and About*, which was a group discussion. No society of IGDTUW has ever been associated with such an organisation of international acclaim and Technoliterati was privileged to be the first one to join hands with UN Women for such a noble cause.

The formal debate event, *War of the Words* took place on 30<sup>th</sup> January, 2015. The topic of the debate was, “*This house believes that freedom is never voluntarily given by the oppressor; it must be demanded by the oppressed; that Men can never be allies for the feminist movement*”. The event gave a chance to all the debating aficionados to ideate and debate on the cause of gender equality and the role of men in promoting this cause. The judging panel included Dr. Patricia Barandon, Representative from the UN Women Office of India, Bhutan, Sri Lanka and Maldives and Dr. Bhavya Raj, Technoliterati Faculty Coordinator. The participation was in a team of two, one speaker speaking for the motion and the other against it. Students from various reputed colleges all over Delhi participated in this event. Certificates and cash prizes were awarded to the winners.

The winners of the event were:

Best Speaker (For): Ankita from Campus Law Centre

Best Speaker (Against): Divya Dua from Kirori Mal College

Best Team: Divya Dua from Kirori Mal College and Aiman from St Stephens College



The Group Discussion (GD) event, *Out and About* took place on 31st January, 2015. The GD took place in two rounds, each consisting of six participants. The topics of the GD were centred on the HeForShe Campaign of UN Women and gave an opportunity to young minds to discuss the role of men in promoting the cause of gender equality. The event was judged by Mr. Preetam Sengupta, Gender/Youth Activist of UNDP and Dr. Bhavya Raj, Faculty Coordinator of Technoliterati. Great enthusiasm was received for this event and it was a pleasure to see so much power in the thoughts and ideas of today's youth. At the end of the event, Shagufta Ali of Deshbandhu College and Dipanshu Pruthi of Shaheed Sukhdev College of Business Studies were crowned winners.

### Wall Magazine

In 2014, Technoliterati started a wall magazine, which was an initiative to give students a medium to *come up and say* what they want and to express ideas regarding day to day issues. The wall magazine is space where students put up articles, poems, short stories etc. about issues that affect them, issues that they want to





voice and issues that they want to be heard. Continuing this trend, Technoliterati has put up three wall magazines till date under the initiative of Malvika Gupta, Core team member of Technoliterati.

The first wall magazine for this academic year was put up in November, 2014, themed, *Life @ College*. Students were invited to write about their most memorable college experiences on post-its which were then put up on the board.

The second edition of the wall magazine was put up in January, 2015.

Seeing the college gear up for *Taarangana*,<sup>15</sup> the Technoliterati team prepared a *Taarangana themed* wall magazine, highlighting the various events under *Taarangana*, particularly *War of the Words* and *Out and About*.

The third edition of the wall magazine was displayed in March, 2015. Themed, *Memories from our Childhood*, it successfully brought back nostalgic moments from the students' childhood. It was enjoyed and appreciated by all the students.



### Online events

Till date, the Technoliterati society has organised two events, the Online Story Competition and The Logo Competition. Both of these events saw good participation from several students, eager to showcase their creativity and talent.

In the Online Story Competition, participants were to weave a story on any one of the two given ideas: "ambitious woman, corporate world, egotistical men, battle, empowerment" or "college fest, 1<sup>st</sup> Year, shy, high hopes, unexpected occurrence, finding true self". The competition received multiple entries and the two best stories were selected. The first prize was given to the story, "An unknown achievement" written by Agamani Paul, while the second prize was awarded to the story "Not weak enough" written by Deeksha Singh.



The Logo Design Competition attracted the creative minds of the college who were willing to be the holder of the insignia of our society. The competition received several entries and the logo submitted by Zoya Farooque was selected to be the emblem of our society.

### TAARANGANA '15

The second Annual cultural fest of IGDTUW – *Taarangana* was held successfully under the guidance and mentorship of Dr. Shalini Arora, Faculty Coordinator and Dr. Chhaya Ravikant, Co-coordinator *Taarangana* '15 on 30th and 31st January'15.

With the launch of the official logo a new identity and a brand value was created for the fest that got plastered all over the social media. With over 14000 likes on its official Face book page, 3300 followers on Twitter and nearly a 1000 followers on Instagram, the social media forums were filled with news and events from





*Taarangana*. A teaser of the fest, that was launched on January 14<sup>th</sup>, 2015 triggered this buzz all the more. In addition to this, the website design and App development team of the fest achieved a great feat of success by creating the website, [www.taarangana.com](http://www.taarangana.com), which correctly portrays what *Taarangana* aims to be. The creation and launch of the *Taarangana* App further

took the fest altogether to a whole new level. This year, *Taarangana*'s popularity reached new heights. The online reach of *Taarangana* is evident from the 500+ participants in the online events including over 200 entries for 'In A Nutshell' (short story writing competition) and over 100 registrations for 'Clickety Click!' -the online selfie competition. New avenues like YouTube, Twitter and Instagram were explored to connect with more college students and realize the dream of bigger and better *Taarangana*.



Over 60 campus ambassadors from different colleges, contributed hugely in making *Taarangana* the most talked about fest of the city. The Event Partner Mileage Events Pvt. Ltd. must also be congratulated for constantly standing by the team and guiding the team throughout the journey.

The fest received an overwhelming response from students across Delhi-NCR. The mellifluous performances in Solo/Duet Dance, Solo/Duet Singing, Fashion Show, Band Competition, Western Dance, and Folk Dance attracted a huge crowd, both as participant and as audience.

Meanwhile, The Auditorium was studded with girls and boys from numerous colleges dressed stunningly, all set to participate in *Mr. and Ms. Taarangana*. Brightening up the essence of the festival was the street play event – *Aghaaz*. Poignant acts by the teams enchanted the spectators. The street plays were enacted on several themes related to social issues like, *the inferior status of women in society*.



The most awaited soirée – the Star Night had the popular Punjabi singer Hardy Sandhu performing, started in the evening. The opening act was a performance by Turkush, followed by an enthusiastic cheer from the colossal crowd that had gathered. As Hardy Sandhu put the stage on fire, the excitement of the audience reached at such high levels that it is almost impossible to express it in words. Both Hardy Sandhu and Turkush not only entertained the crowd with their spectacular singing skills but also forced the audience to shake their legs every now and then to match the rhyme and rhythm of their performances.

The enthusiasm of the crowd surpassed its zenith during the Folk Dance competition where participants from different colleges performed remarkable feats along with a marvellous display of the diverse folk culture of our country. The western dance completion also enthralled everyone with their amazing synchronization and superb dancing styles. All in all Tarangana proved to be a full fledged fun filled extravaganza which gave a perfect platform to all the students to work, organize, manage, participate and have fun at the same time.



## TECHFESTS

### CSE TREMORS 15.0

Tremors 15.0 in association with the Computer Society of India, just got better this year. This would not have been possible without the support of our Online media partners- Twenty19 and FaadooEngineers.com, Education partner- ACE Engineering Academy, Youth marketing partner- The Education Tree, Print media partner- Aapka Times, Programming partner- HackerRank, Merchandise partner- WebBlitz, Style partner- SpyKar, Entertainment partner- Worlds of Wonder, Communication partner- Line, Banking partner- Punjab

National Bank, Informal event prizing partner- Eva, Food partners- Dil se and Giri Momos, and our other sponsors which included Purete Unisex Salon, Kyron Technologies, Bonzai, Crepe Rolls and ChipYard. Tremors 15.0 started with a range of various formal events that included 'Roborace', 'Fastest Coders First': an event designed especially for those interested in algorithmic coding, 'Gatequiz': for GATE aspirants, quizzes, 'Blind Typing', and of course, 'LAN Gaming'. This Tremors saw the first edition of 'Developers@work', an event to encourage budding developers, be it a web-site, game, an app, or an idea to make people smart.

#### K e e p i n g

in with the theme of this year- 'Nineties', Tremors 15.0 included quizzes and events for designing. But to keep it interesting and remove the formality out of the events, fun events like 'Swat Cats' that tested compatibility of team members, 'Eat Them Beat Them', 'F.R.I.E.N.D.S', 'Roadies' based on the famous MTV show, 'Sa Re Ga Ma Pa', a singing competition and many more were also held. The fest saw a huge participation from the students of Delhi Technological University (DTU), Indian Institute of Technology (IITD) and the various colleges of Delhi University and IP university. The school students from Delhi- NCR were not far behind and enthusiastically participated in various events. Students from Mt. Carmel School stood second in the formal event 'Roborace'. Hard work with dedication of the sponsorship, formal and informal events, website, creativity and publicity teams made Tremors 15.0 a grand success.



### ECE IMPULSE'15



(27-28 March 2015)

"Technology has to be invented or adopted." - Jared Diamond

Department of Electronics & Communication, Indira Gandhi Delhi Technical University for Women (IGDTUW) in association with IEEE Student Branch successfully organized its 9th edition of annual Technical cultural festival " IMPULSE'15" which was held from March 27 to March 28, 2015 under the guidance of branch mentor- Mr. Akash Tayal, Asst. Prof. and branch counsellor Prof. Ashwni Kumar. The much awaited fest brought



to the students of Delhi a platform to showcase their talents in all the diverse fields possible. The first edition of the festival was organized in the year 2007.

Impulse was formally inaugurated with the lighting of a lamp by Prof. Nupur Prakash, Vice Chancellor, on March 27. The festival kicked off with an Inaugural Ceremony cum felicitation ceremony where students with distinctive technical

achievements from all departments were felicitated by honourable Vice Chancellor and Registrar IGDTUW. Impulse saw an enthusiastic participation in all the competitions held, from prestigious colleges like SRM, IIT, JMI, DTU, MAIT, IIIT, etc. The first day of the fest saw formal events like Trail-O-Bot (a race of ROBOTS), Sprint-o-Bot, Sphinx, Tech-Yatra. Trail-O-Bot was a big hit. The fest also had several informal events as FFF Flim Furkey (A bollywood quiz), Blind Dating and Inkspired. After an exuberant first day, the second day of Impulse flagged off with ArduinoMite on The World Arduino Day. ArduinoMite was a platform for budding engineers to showcase their Arduino based projects. Team Robolution of IGDTUW also displayed their Badminton playing robots which uses Arduino Mega microcontroller. TPP – technical paper presentation competition was also held on the second day of the fest. Also Word Attack (Debate), and KalamSe (a poetry writing completion) was held for people who can put thoughts to words. Informal events for the day included Unlock the Sherlock. The Gamers were not left behind as we had LAN-GAMING on the final day of the fest. The fest saw a footfall of 2,500 people from various colleges from all over Delhi NCR and was undeniably a grand success.



## IT ESPECTRO' 15

Students at Department of Information Technology, under the aegis of ACM Student Chapter, worked meticulously over the past few months to organize the annual technical extravaganza titled "ESPECTRO'15" which was scheduled on 27th – 28th March, 2015. A number of online and offline technical competitions (events) were organized during these two days.

For smooth conduct of festival, students developed software & applications, whose key features are:-

- Student event organizers can register their events and its details, after which events automatically show-up on Espectro'15 website.
- Online registration of participants for all events. Each participant can see the events she is registered into and would be able to see the results as they get declared online.
- Applications for most of technical events are developed by student event developers so that their event could be conducted in e-mode.
- Details of events were put up on website and apps, details given below.



Websites: Developed and hosted in-house on Server at Computer Center, IGDTUW.

ACM Chapter: <http://tinyurl.com/acm-igdtuw>

Espectro'15: <http://tinyurl.com/espectro15>

Mobile Apps: Developed by students.

Android App: Search for "igdtuw espectro" on any Android based mobile phone.

<http://tinyurl.com/android-espectro>

Windows App: Search for "igdtuw espectro" on any Windows based mobile phone.

<http://tinyurl.com/windows-espectro>

Technical extravaganza saw over 20+ events (competitions) organized by 50+ student organizers in which 500+ students participated from IGDTUW and outside.

Valedictory ceremony was organized on 1st April, 2015 to compliment, felicitate and encourage students for the successful conduct of technical festival.



## MAE XEBEC

IGDTUW's Mechanical and Automation Engineering (MAE) Department hosted its annual technical fest Xebec on 27th and 28th March, 2015. The fest, which is generally looked forward to by engineering college students in Delhi NCR, bigger and better than ever before! Remarkable technical events like Robowars, Junkyard Wars, Mech Software Master (CAD designing competition), Dirt Ride 3.0, along with fun events like Ground Roller, Zorbing were hosted, manifesting excitement and eagerness amongst all! The event Technical Paper Presentation, which is always swarmed by students passionate about research, was taken to a new level, with CATAPOOOLT rewarding 5 Lac points (worth INR 1 Lac) to the winner. The fest was powered by Maruti Suzuki and has Worlds of Wonder, Catapooolt, Bonzai, Yatra Diaries, ByronIndia, Coca Cola, Lipton, Lean In, T.I.M.E., Trump and Gates, CADD Centre, ZAE, IMS, Fingerprint, Mission I Am, Arsh Foods, Pik Education, Aapka Times, The Education Tree, Print Any Think as sponsors!

Thrilling events, exciting cash prizes and vouchers for the winners, stunning decorations and fantastic food stalls, served hot with the amazing crowd that gathered, made Xebec, undeniably, a big hit!

## SPIC MACAY Chapter IGDTUW



The SPIC MACAY chapter of IGDTUW organised an enthralling Odissi Dance Recital by one of the most renowned Odissi dancers of our time, Padam Shree Madhavi Mudgal on 14<sup>th</sup> Oct, 2014. Prof. Nupur Prakash, Vice-Chancellor, IGDTUW and Prof. Ashwini Kumar, Dean-Student Welfare, IGDTUW welcomed Madhavi Mudgal ji to a full house of enthusiastic students. She was accompanied by Mr. Gandhi Malik on Pakharaj, Ms. Manikuntala Bhaunik on vocal, Mr. Purna Chandra Maji on vocal, Mr. Yar Muhammad on Sitar and her student Ms. Shobha Bisht as her accompanist on the stage.

Madhavi ji commenced the mesmerising evening with her first dance piece, which was an offering to the mother earth & the Almighty. She then explained some intricacies of the dance form to the captivated audience and also presented an enactment of a snippet Radha-Krishna's life. She concluded the evening's performances with a piece titled 'Pallavi'. She stressed on the importance of our classical art forms and brought it out wonderfully in her recital, making it a wholesome learning experience for all.

## GREENSPHERE

The GreenSphere society at IGDTUW came into existence with a vision to protect and conserve the environment by taking the Green route under the guidance of Faculty Advisor, Dr. Ranu Gadi and Faculty Coordinator, Mr. Dhanjay Yadav. The Core Members for the session 2014-2015 are Bhanu Kalra, Khushali Khurana, Tanya Saini, Varnali Dutta and Vibha Kashyap. The society organized multiple awareness campaigns and events as a part of their Go Green initiative.

### Adopt a sapling

The Greensphere Team followed its tradition of welcoming the freshers with a plant sapling. On 5<sup>th</sup> August 2014, the day of orientation, a plant sapling was given to all the freshers outside the auditorium as token. About 100 saplings were distributed.



### Swachh Bharat Abhiyan experience for all.

Greensphere organised an online painting competition on the theme 'Cleanliness for a better tomorrow'; a Group Discussion on the topic 'How effective Swachh Bharat Abhiyan will be in India' and a quiz competition was also conducted during first week of October. These events witnessed participation in huge numbers. A cleanliness drive was also organized.

### Installation of paper recycling unit

The paper recycling unit was set up at the IT block in college campus on 14<sup>th</sup> October 2014 by Greensphere. The demo of the machine was given by Mr Piyush Pant in the presence of faculty members. The equipment for recycling is innovative, low cost and efficient whereas as the process for the same is simple, safe but sophisticated. The recycled paper has constantly been used for pledges, invitations for our cultural festival-Taarangana, making files, bags and pen stands.

### Anti-crackers pledge



A pledge was taken on 20-21<sup>st</sup> October 2014 to celebrate Diwali-festival of lights, in an environment friendly way (Green Diwali). The pledge stated '*This Diwali light the Earth with happiness and not by crackers*'. Paper recycled by the Greensphere members was used to make the pledge. The pledge was taken by Ms. Nupur Prakash (Vice Chancellor), faculty members, staff members and students of the university. The students were made aware of the harmful effects of the crackers and were motivated to celebrate eco-friendly Diwali.

### Events during Taarangana 15

Interesting games like treasured rangoli, best out of waste and ad-mad were organised during the cultural festival, Taarangana on 30<sup>th</sup>-31<sup>st</sup> January to create ecological awareness in a fun-filled yet subtle manner.



## Catharsis '15

The tacit efforts of the faculty members as well as the students of Eco-Club- GREENSPHERE of IGDTUW and Eco-Club-URVAR of Ambedkar Institute of Advanced Communication Technologies & Research, Delhi, under the aegis of Department of Environment, Govt. of Delhi, with the guidance of Dr.B C Sabata (Sr. Scientific Officer, Dept. of Environment), organized a one day environment awareness event *Catharsis* on February 13<sup>th</sup>, 2015. The event witnessed participation and appreciation from colleges all over Delhi.



The inaugural began with a plantation drive by the eco-club faculty coordinators and members of the two colleges- Greensphere and Urvar in the IGDTUW grounds. To celebrate the spirit of the cause, events like Poster Making, Ecofie, Debate, Best out of Waste, Run for a Sapling, Environment quiz, Treasured Herbal Rangoli, Seminar on e-waste, etc. were organised. Catharsis also witnessed prolific donations in terms of old clothes and e-waste from faculties and students. Saplings were also distributed among the participants and winners.

The day was brought to an end by the much awaited DJ Night and a crowd celebrating their bond with nature. Catharsis' first phase accomplished the task of drawing everybody's attention to mother Earth to revise our obligations for a greener and cleaner world.



### Installation of Dustbins

Permanent metallic dustbins have been set up in the college campus by the Greensphere team. The dustbins have been installed near the canteen, outside GCR and in college grounds. Separate markings have been done for biodegradable and non-biodegradable waste.

### Eco-Friendly Holi Celebration

On the occasion of Holi, festival of colours, an initiative was taken by the students of Greensphere to celebrate an Organic Holi on 3<sup>rd</sup> March'15. Herbal colours made by specially abled were distributed to all the faculty members and students.

Along with this, a pledge was taken to celebrate clean and green Holi. Waste paper recycled by the students of Greensphere was utilized to make the pledge.

## Code benders- Code Chef Campus Chapter of IGDTUW

CodeChef is a non-commercial educational initiative from Directi, an internet products company based in Mumbai, India. With CodeChef, the aim of the company is to create a global community that fosters learning and friendly competition.

The CodeChef Campus Chapter of our college was registered on August 8, 2014 with Ms. Smita Kapur as mentor and Diksha and Somya Khosla, students of second year as campus chapter representatives. Since then the group has actively organized coding competitions in college and encouraged fellow students to take part in various international level coding competitions like Face book Hacker Cup, Google Code Jam and ICPC.

# NEW FACULTY APPOINTMENTS

## CSE Department

### Dr. Ela Kumar

#### Professor



Dr. Ela has joined as a Professor in the Department of Computer Science & Engineering Delhi, India in 2014. She has done Ph.D in Artificial Intelligence from NSIT, M.Tech in Computer Science and technology and B.E in Electronics and communication from IIT Roorkee. She has a professional experience of more than 25 years. She had published more than 60 research papers in International Journals & Conferences and has authored 4 books. She has also supervised 5 Ph.D scholars under her guidance.

### Dr. Seeja.K.R

#### Associate Professor



Dr. Seeja.K.R has joined as an Associate Professor in the Department of Computer Science & Engineering, Indira Gandhi Delhi Technical University for Women, Delhi, India in September 2014. She has done Ph.D in Computer Science from Jamia Hamdard, M.E in Computer Science & Engineering from Madurai Kamaraj University and B.E in Computer Engineering from MS University, Thirunelveli. She has a teaching experience of more than 16 years. She had published more than 20 research papers in International Journals & Conferences. She is currently doing a Major Research Project on "Solving Travelling Salesman Problem with Sparse Graphs" as Principal Investigator funded by UGC.

### Ms. Monika Choudhary

#### Assistant Professor



Ms. Monika Chaudhary has done her M.tech from IIT- Roorkee and has recently joined Indira Gandhi Delhi Technical University for Women, as assistant professor. She has teaching experience of 2 years. Her areas of interest are Cloud Computing, Distributed Computing, Operating systems, Algorithms.

## ECE Department

### Dr.Jasdeep Kaur Dhanoa

#### Associate Professor



Dr. Jasdeep Kaur Dhanoa did her Ph.D. in Applications of Self Cascode in Low Voltage Analog Design, from GGS Indraprastha University, M. Tech (Electronics & Communication Engineering) from Delhi College of Engineering and B.E. (Electronics). She joined IGDTUW in 2014. She has a teaching experience of over 18 years at GTBIT, (affiliated GGSIPU) and Netaji Subhas Institute of Technology. She is an active member of ISTE, IETE, IEEE Delhi Section and WE00123. She is Vice Chair of WE00123 - Delhi Section Affinity Group,WIE-2015 and Chair Educational Activities of IEEE Delhi Section, 2015. She has guided a number of B.Tech projects and published about 6 research papers in International/ National Journals and about 20 research papers in International/National Conferences.



### **Dr. Nidhi Goel**

#### **Associate Professor**



Prior to joining IGDTUW as an Associate Professor, Dr. Nidhi Goel was associated with Delhi Technical University (Formerly, DCE). She has a teaching and research experience of approximately 14 years. She received her B.E. degree in Electronics and Communication and M.Tech. Degree in Digital Communication in 2001 and 2006, respectively. She has completed her Ph.D. from Department of Electrical Engineering, Indian Institute of Technology Roorkee. She has published several research papers in reputed journals and International Conferences. She has guided several Masters Thesis and published a book chapter in Springer Verlag. Her area of interest include embedded systems, system on chip, wireless communication, multimedia encryption and visual cryptography.

### **Dr. Richa Yadav**

#### **Assistant Professor**



Dr. Richa Yadav has worked as an Assistant Professor in Bharati Vidyapeeth College of Engg., Delhi before joining IGDTUW as an Assistant Professor in February, 2015. She has a teaching experience of over 5 years. She received her B.E and M.Tech degree in Electronics and Communication Engineering from Vaish College of Engineering. She completed her Ph.D at NSIT Delhi in January 2015. As a Teaching Cum Research Fellow (TRF) at NSIT Delhi, she has published 8 research papers in international journals, 3 research papers in international conferences and 6 research papers in national conferences.

### **Ms. Neha Singh**

#### **Assistant Professor**



Ms. Neha Singh received her B.Tech degree in Electronics and Communication Engineering from Madan Mohan Malaviya Univ. of Technology, Gorakhpur, in 2010 and her M.Tech in Laser technology from IIT Kanpur in 2012. She worked as an Assistant Professor in Future Institute of Engg. & Technology, Bareilly from Aug 2013 to Feb 2015 before joining IGDTUW in February 2015.

## **IT DEPARTMENT**

### **Dr. Arun Sharma**

#### **Associate Professor**



Dr. Arun Sharma completed his PhD Degree from Thapar University, Patiala in 2009. Prior to this, he did M.Sc. (Applied Mathematics) from University of Roorkee (now IIT Roorkee) in 1994 and M. Tech. (CSE) from Punjab University, Patiala in 1997. He has an teaching of 18 years in various reputed Govt. and Pvt. Institutions and recently he has joined as Dy. Dean (Examination Affairs) and Associate Professor at Indira Gandhi Delhi Technical University for Women (IGDTUW), Delhi. His areas of interests include Software Engineering, Soft Computing and Database Systems. He has published more than 50 papers in international journals and conferences including IEEE, ACM, Springer, Elsevier, Wiley and several others. Dr. Sharma is a Senior Member of IEEE and Life Member of Computer Society of India. He is the Chairman of Computer Society of India (CSI) - Ghaziabad Chapter for 2015-16. He is also on the panel of Experts for various reputed institutions.

**Ms. Aruna Bhat****Assistant Professor**

Ms. Aruna Bhat has been an Assistant Professor at Indira Gandhi Delhi Technical University for Women, Department of IT, since Dec, 2011. She did her M.Tech and B.Tech from Guru Gobind Singh Indraprastha University. She has been associated with Tata Consultancy Services. She is also pursuing Phd from Indian Institute of Technology, New Delhi. Her areas of interest are DBMS, Software Engineering, Pattern Recognition.

**Ms. Nidhi Arora****Assistant Professor**

Ms. Nidhi Arora joined as an Assistant Professor at IGDTUW in the Department of IT in August 2013. She did B.Tech in IT from GGSIPU, Delhi and M.Tech in CSE from IIT Delhi. She is pursuing Ph.D from IIT Delhi. She has about 04 years of teaching experience. She has published 03 research papers. Her areas of interest are Operating Systems, Data Structures and Algorithms.

**Ms. Nisha Rathee****Assistant Professor**

Ms. Nisha Rathi has done her B.Tech and M.Tech from MDU, Rohtak. She has recently joined Indira Gandhi Delhi Technical University for Women, as assistant professor. Her areas of interest are Software Testing, Data mining, Data Structures.

## APPLIED SCIENCE AND HUMANITIES DEPARTMENT

**Dr. Bhavya Raj****Assistant Professor**

Dr. Bhavya is presently working as Assistant Professor in English and Communication Studies at IGDTUW. She possesses ten years of teaching experience and has worked with Engineering and Management colleges of repute before joining the University. She has Published and presented 14 research papers in journals and national and international conferences.

**Mr. Dhanjay Yadav****Assistant Professor**

Mr. Yadav has total experience of more than 8 years in Academics and Industry. His previous association has been with Satyawati (Eve.) College Delhi University, Vishveshwarya Group of Institutions G.B.Nagar, Religare Securities Ltd. & Indiabulls Securities Ltd. He is currently pursuing his Ph.D through BIMTECH Gr. Noida. He has published and presented 4 research papers in journals and national and international conferences.

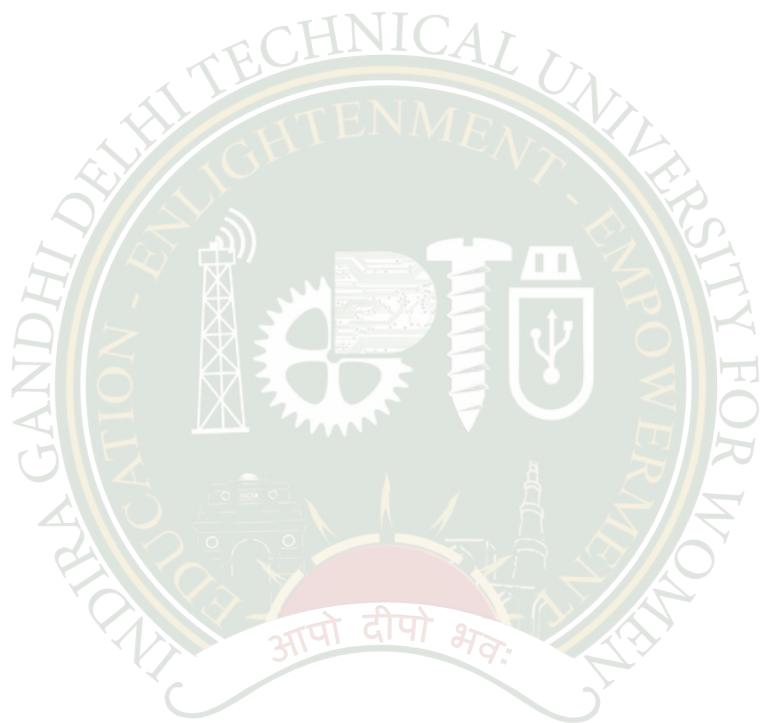


**Dr. Bhavani Prasad Naik Nenavathu**

**Assistant Professor**



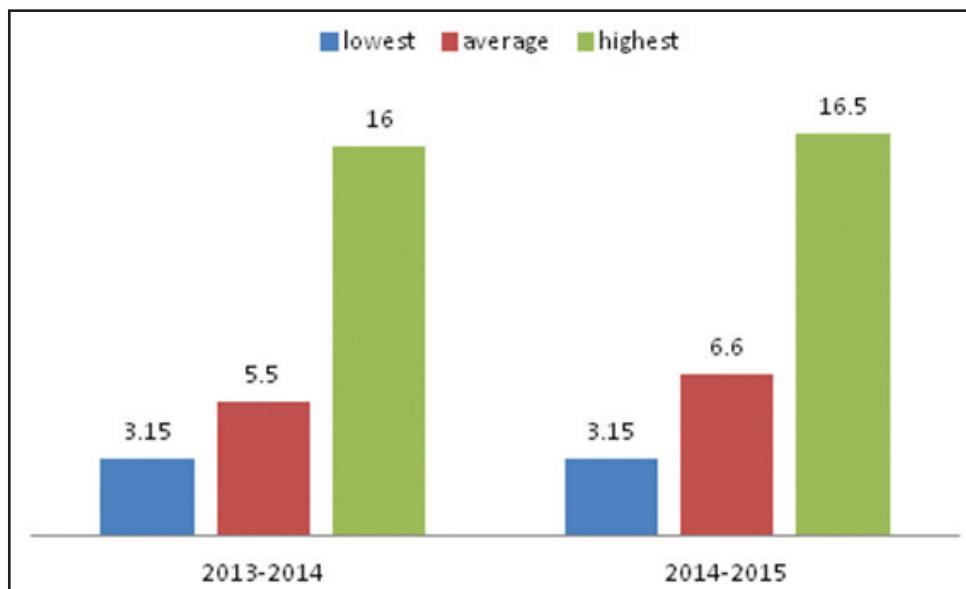
Dr. Bhavani Prasad is presently working as assistant Professor at IGDTUW. Prior to this, he has worked as post-doctoral research fellow at the Zhejiang University, China. He received his PhD in 2013, from IIT Roorkee, where he carried out studies on antibacterial and photocatalytic applications of ZnO nanoparticles. He is currently working on the photocatalytic properties and applications of graphene oxide-metal oxide nanocomposites. His scientific interests focus on synthesis and tuning of graphene-metal oxides nanocomposites and to study the effect of their optoelectronic and morphological properties in photocatalysis, water splitting and super capacitors etc.



## PLACEMENTS

The Training and Placement Cell successfully and ably facilitates the campus recruitment program at IGDTUW. The cell comprises of highly energetic and dynamic team of students and faculty members of the University. The team is consistently striving to enhance the quality and quantity of the placements in the university.

The University T&P Cell facilitates 100% placements with multiple job offers to the students of IGDTUW every year. During the recruitment drive around 35 companies visit the campus every year. Prestigious companies like Microsoft, Cisco, SAP Labs, GE Global Research, Maruti Suzuki, Fluor Daniel, Oracle, Mc-Kinsey, Sabre Holding, Mahindra & Mahindra, Cummins, General Motors, Cognizant, Aricent, Tata Consultancy Services, Yamaha Motors, IBM India, Aricent, Accenture, SnapDeal, Flipkart, Expedia, etc visit IGDTUW campus for placements and internships.



### Students Pursuing Higher Studies

Following students of B.Tech.(IT) first batch 2010-14 are pursuing higher studies.

- **Pooja Gupta**, M.Tech.(CSE) specialization in Information Security, IIIT, Delhi.
- **Devika Singh**, M.Tech.(Software Engineering), DTU, Delhi.
- **Latika Saini**, PG programme (Management Education), IIM Indore.
- **Harshita Lal**, MBA, Symbiosis, Pune.



	Name of Company	CTC (Rs in Lakhs)	No. of Selects 2015		Dept. of ECE	Dept. of IT	Total
			Dept. of MAE	Dept. of CSE			
1	Flour Daniel Ltd.	5.5	30	0	0	0	30
2	Mahindra and Mahindra	5.5	1	0	0	0	1
3	General Motors	5	6	0	0	0	6
4	Eaton Corp.	4.9	2	0	0	0	2
5	Maruti Suzuki Ltd.	5.5	1	0	0	0	1
6	TVS Motors Ltd.	4.5	3	0	0	0	3
7	TCS	3.18	6	43	48	38	135
8	Accenture	3.15	0	9	8	5	22
9	Aricent	3.5	0	8	11	9	28
10	SAP Labs	8.25	0	3	2	3	8
11	Ericsson	3.45	0	5	4	12	21
12	IBM	3.15	1	9	6	10	26
13	Cisco	10.9	0	8	2	2	12
14	Microsoft IT	10.38	0	13	0	7	12
15	Microsoft GD	10	0	4	0	4	4
16	InfoEdge	5	0	1	0	0	1
17	Sabre Holdings	7	0	1	0	0	1
18	Yamaha	3.2	0	1	0	1	2
19	Thoughtworks	6.23	0	0	0	2	2
20	McKinsey	10	0	0	0	1	1
21	Eaton	4.9	0	0	2	0	2
22	Honeywell	-	0	0	2	0	2
23	Azcom	6	0	0	3	2	5
24	Snapdeal	16	0	2	0	2	4
25	Oracle	6	0	3	0	1	4
26	Intuit	16.5	0	0	0	4	4
27	Tavant Technologies	4	0	0	0	4	4
28	GE	-	0	0	2	0	2
29	Expedia	3.6	0	2	0	1	3

## MEDIA BYTES

The university has always received due media attention for all its major fests, events and activities along with extensive coverage for various academic and scholastic endeavours like orientation programme, faculty development programmes, trainings, seminars workshops, etc. We bring for you some glimpses of the media bytes.

# Engineering university for women

## State varsity status upgrade for Indira Gandhi Institute of Technology

NEW DELHI, DHNS: Chief minister Sheila Dikshit on Thursday announced the opening of the first women's technical university in the country in Kashmere Gate.

The erstwhile Indira Gandhi Women Institute of Technology which was opened in 1998 has now been upgraded to a state university by the city government.

Dikshit said she was unable to express her pleasure over commissioning of an exclusive technical university for women in the city.

"We are confident that this university will soon acquire a unique recognition among all other women universities of the country. The erstwhile In-



dira Gandhi Women Institute of Technology has earned a special recognition due to the best performance of women students," said Dikshit.

"We believe it will continue the tradition of imparting quality technical education to girls," she said.

**The focus will be on engineering, technology, applied sciences, management and its allied areas to achieve excellence in these and related fields**

Dikshit added that the university will go a long way in improving number of women engineers in prominent Indian companies and MNCs.

**The location**  
Housed in erstwhile Delhi College of Engineering building,

and its allied areas to achieve excellence in these and related fields.

Eighty-five per cent seats are reserved for girls from Delhi. "This will help our girls to acquire excellence and take up the best assignments in prestigious companies. The passout girls from the new university will contribute subsequently in the progress and prosperity of the nation," said Dikshit, who also released the admission brochure of the university.

Higher education minister Dr A K Walia, parliamentary secretary to CM P S Sahney, vice chancellor Prof Nupur Prakash, director higher education S N Jha and registrar IP University B P Joshi were also present.

14 MONDAY  
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→ BYTES

## ROBOTICS AND AUTOMATION

Lakshmi Isaac/TNN

Indira Gandhi Delhi Technical University for Women has launched a new MTech programme — MTech in robotics and automation — with a focus on developing inter-disciplinary skills among women engineers. "India is emerging as a major auto-component manufacturing hub in the global market and is growing at the rate of 30% per year. This programme enables students to gain expertise in the next generation of robots, industrial robots and automation

systems, thus facilitating their application and adoption in the manufacturing sector. The programme will also ensure the placement of students in various companies. It has been started with a vision to increase the venture of automation and rapid re-thinking of intelligent robots and automation technologies for smart manufacturing and applications," says Nupur Prakash, vice-chancellor, Indira Gandhi Delhi Technical University for Women.

India is emerging as a major auto component manufacturing hub in the global market and is growing at the rate of 30% per year. The programme enables students to gain expertise in the next generation of robots, industrial robots and automation systems, thus facilitating their application and adoption in the manufacturing sector.



The two-year programme covers various areas such as manufacturing automation, robotic engineering, mechatronics, computer-aided manufacturing, computer-aided design, computer-integrated manufacturing, flexible manufacturing systems and machine vision, etc.

The mechanical and automation engineering department has specialised faculty in the area of manufacturing automation and robotics. All the major subjects of this course will be taught by in-house faculty. The department will also seek support from some industrial

and academic experts to take classes for once courses.

Once students complete the programme, they can seek opportunities in various Indian and multinational companies working with robots and flexible manufacturing systems apart from various engineering consultancy firms.

"Almost all the automobile engineering companies use robots in their paint and welding shops. Therefore, robotics and automation technologies are in demand nowadays as they offer flexibility and enhance productivity in the manufacturing industry. DMRC engineers make heavy use of

mechatronics in the control of metros and almost all cars are equipped with sensors, remote key entry and use microcontrollers in their Engine Management Systems (EMS) and fuel injection systems. So, students will have a variety of options to choose from once they complete the course," adds Prakash.

They also help students with placements and training and internship opportunities.

Students with a minimum 60% marks or equivalent in the qualifying examination in BTech/BE degree, computer science/computer engineering, instrumentation and control, electrical and communication engineering — mechanical, electrical, production, mechanical and automation, industrial, automobile or equivalent from a recognised university can apply.

AMIE/AIIMT/ scores in relevant disciplines will also be taken into account.

The application forms and admission brochure can be purchased for Rs 500 from the branches of Punjab and Sind Bank in Delhi only. For more details, log on to [www.igdtu.ac.in](http://www.igdtu.ac.in).









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