# NEWSLETTER -JULY 2010

# Dronacharya College of Engineering

## ISSUE

*vol v issue xlviii*

### Electronics & Communication Engineering

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## From Editor's Desk :

*"The mind is not a vessel to be filled but a fire to be ignited".*

We, at DCE, have been continuously striving to upgrade the knowledge and skills of our students. We are widely recognized for the practical and applied nature of engineering subjects which equip graduates with essential skills through exposure to industry and research across the globe.

Our focus is on preparing students to be not only academically proficient, but also experienced in critical thought, appreciative of creative expression, aware of ethical standards and efficient in effective communication. A number of activities besides **university syllabi** are undertaken which help **Dronacharyans** in utilizing their creative talents and delivering corporate objectives.

We also have a full-fledged **Training and Placement Cell** that organizes motivational lectures, industrial tours, aptitude tests, mock interviews, group discussions and many more activities to meet our target.

**Dronacharya College of Engineering** is a vibrant technical institution providing academic excellence to the aspirants. We invite you to join us as we move forward shaping the future of prospective engineers.

*Editor, (Dr. Sunil K. Mishra)*

## From HOD's Desk :

The last quarter at DCE has been full of activities. The College organized DRONTECH 2010 encompassing very exciting events ranging from Seminars, Workshops, MatPro, Quizzes, Paper Presentation, Project Competition and Auto CAD etc.

We celebrated the **"Convocation Ceremony"** on **19th June 2010** and distributed degrees to the students who passed out in 2009. **Prof. R. K. Chauhan (Former Seceretary, UGC)** was the chief guest of the

Our students again bagged the positions in the merit list of M D University results 2009. They have maintained the rising trends and redefined caliber, knowledge, intelligence and wisdom of **Dronacharyans**.

The **National Seminar on "Robotics and its Applications"** organized on **21st & 22nd April 2010** by the Robotics Club of the college running under the aegis of ECE department has been very successful and beneficial for the students. It was organized in association with IIT Delhi and 'Building Blocks', a private enterprise of repute dealing in the field of Robotics.

The ECE department is working hard to achieve academic excellence in its field by continuously guiding and motivating the students.

We are proud to be guided by the broad vision of **Dr. Satish Yadav, Hon'ble Chairman.**

The ECE department is committed towards providing skilled technocrats who will excel themselves in the global society.

*Head of Department ECE (Prof. (Dr.) H. S. Dua)*

## Events :

### Robotics Club Seminar

- The Department of Electronics & Communication Engineering under the banner of Robotics Club organized a two-day **'National Seminar on Robotics and its Applications'** in association with IIT New Delhi on **21st & 22nd April 2010**. The student members of Robotics Club also presented their papers and projects. The seminar acted as a platform for discussion and updation of knowledge on the recent developments in the field of robotics and its applications.
- On the second day of seminar a competition of making robots was organized in which the team of ECE students got the first prize.

### Convocation Ceremony

"Success is finishing something you started and then starting something that never finishes." That was the thought that etched on the minds of engineering graduates of 2009 batch of Dronacharya College of Engineering who had their **convocation ceremony on 19th June 2010**. The ceremony started with the lighting of lamp by the Chief-Guest and other guests of honour. **It was the most proud moment for students joined for the cap throwing ceremony after receiving their degrees.**



*Welcome of the Chief-Guest Prof. R. K. Chauhan by the College dignitaries.*



*The Chief-Guest garlanding on the replica of Goddess Saraswati.*

*HOD, ECE, Prof. (Dr.) H. S. Dua garlanding on the replica of Goddess Saraswati.*



*The College dignitaries with Hon'ble Chief-Guest at the Convocation Ceremony 2010.*



*Welcome address by the Principal, DCE, Prof. (Dr.) B. M. K. Prasad.*



*Hon'ble Chief-Guest Prof. R. K. Chauhan addressing the audience.*



*Hon'ble Principal, DCE, presenting a memento as a token of honour to the Chief- Guest.*



*A young graduate receiving her B.Tech Degree from the Chief-Guest.*

## Dronacharya Research Journal

The second issue of the Dronacharya Research Journal is already under print wherein a large number of faculty members and students from ECE department have contributed their papers on various topics of technological advancements.

| S. No. | TOPIC | FACULTY/AUTHORS |
|--------|-------|-----------------|
| 1 | Technology and Terrorism | Prof.(Dr.) H. S. Dua <br> Mrs. Meha Sharma <br> Rahul Gupta (VIII Sem ECE Student) |
| 2 | Bluetooth technology: <br><br> Emerging trends and applications | Prof. Y. P. Chopra <br> Rohit Khanna (VIII Sem ECE Student) <br> Meenu Rathi (VIII Sem ECE Student) |

| S. No. | TOPIC | FACULTY/AUTHORS |
|---|---|---|
| 3 | Propagation models for high sites in urban areas | Prof. (Mrs.) A. N. Mahajan<br>Nakul Singh (VIII Sem ECE Student)<br>Abhishek Dutt Mohla (VIII Sem ECE Student) |
| 4 | Soft computing methodologIes in Internet application : A Survey | Mr. Vinay Kumar Nassa<br>Dr C. Ram Singla Neha Shakya (VIII Sem ECE Student) |
| 5 | Information Theory bottleneck  for mobile adhoc network | Mr. Vinay Kumar Nassa<br>Mr. P. Patnaik<br>Sameer Wasan (VIII Sem ECE Student) |
| 6 | Nanotechnology and its applications | Mrs. Naresh kumari<br>Chitra Dhar (VIII Sem ECE Student)<br>Udit Gupta (VIII Sem ECE Student) |
| 7 | RFID: Applications and Comparisions | Mrs. Swati Jha<br>Shipra Sharma (VIII Sem ECE Student)<br>Deepak Kapoor (VIII Sem ECE Student) |
| 8 | Theory and Design of Solid state Microwave Phase Shifter | Mrs. Sakshi Pahuja<br>Anubhav Sachdeva (VIII Sem ECE Student)<br>Harshita (VIII Sem ECE Student) |
| 9 | Crystallization Kinetics Of New Sealant Material For Sofc | Mrs. Neha Gupta<br>Mrs. Dimple Saproo<br>Rita Yadav  (VIII Sem ECE Student) |
| 10 | Global Electric  "Power Highways'' | Mrs. Seema Das<br>Mr. Chandra Shekhar Singh<br>Gaurav Chug (VIII Sem ECE Student) |
| 11 | Link Modeling Of Various Propagation Models For Wireless Communication | Mrs. Shampy Ajrawat<br>Ritika Lamba (VIII Sem ECE Student)<br>Yash Verma (VIII Sem ECE Student) |
| 12 | Neuro Chips | Mrs. Bhawana Verma<br>Apoorva Kaushik (VIII Sem ECE Student)<br>Avni (VIII Sem ECE Student) |

## Industrial Visit

A team of final year students accompanied by **Prof. (Mrs.) A. N. Mahajan** was taken for an industrial visit to M/s Relcom Engg. Pvt. Ltd., Najafgarh New Delhi on **19th Feb 2010**, for a first hand exposure of students to the industry, dealing in Mobile Communication hardware and infrastructure.

## Placement

A number of reputed companies have come for campus placement including Logotech India Pvt. Ltd., Dell International Services , Omnitech Security ,HBL Power System Ltd. IT Global Software and Accenture Technologies in the last quarter. We are proud to share that more than **70 students of 2010 batch** have already been placed in companies.

## National Seminar at LIMAT, Faridabad

Following 7 Faculty members from the ECE department presented research papers in the **National Seminar at Lingaya's Institute of Management and Technology, Faridabad on 22nd-23rd February 2010**:

| S. No. | Name Of Faculty | TOPIC |
|---|---|---|
| I | Mrs. Swati Jha & Mrs. Meha Sharma | A Comparative study of Straight Solar and Hybrid System using HOMER software. |
| II | Mrs. Jyoti Dargan & Mrs. Neha Gupta | Future Efficient Energy Sources. |

| S. No. | Name Of Faculty | TOPIC |
|--------|-----------------|-------|
| **III** | Mrs. Naresh Kumari & Mrs. Sakshi Pahuja | Behaviour Based Control of Complex Robotics Systems |
| **IV** | Mrs. Seema Das | Capacitor Commutated Converters on HVDC Transmission Line. |

## Workshop on High Impact Teaching Skills

A five - day workshop was **conducted by WIPRO** at Ansal Institute of Technology Gurgaon **from 31st May to 4th June 2010**. Two faculty members **"Mrs. Naresh Kumari & Mrs. Sakshi Pahuja from ECE department"** attended the workshop. The workshop highlighted the need for interactive and participative sessions and was focused on how to involve students with optimum attention in teaching learning process.

## *Live Project Undertaken by Students*

## GSM Based Security System

The aim of this project is to design a Home security system for detecting an intrusion into a monitored area by an infrared detector. A security system has a free-standing intrusion detector. The free standing intrusion detector has a transmitter coupled with a portable receiver to alert a homeowner that an intrusion has taken place or occurred within a pre-set time period. The area under surveillance is monitored by an infrared detector which activates the transmitter upon the detection of abrupt differences in infrared radiation levels, associated with the presence of a warm body in an otherwise equilibrated environment.

A radio signal is emitted by the transmitter which is received by the portable hand-held remote receiver. A signal, indicating that an intrusion has been detected in less than a preselected period of time, is displayed on the receiver for that preselected period of time. After the preselected period of time has elapsed, another signal is generated to indicate that the intrusion took place at a time greater than the preselected period of time in the past and that the probability of the intruder still being present is less. Once the intrusion detector is activated, the signal is continuously transmitted to the portable receiver until the intrusion detector has been reset.

**Project Guide**

- Mr. Vinay Nasa

**Team**

- Lovdeep Pahuja       (9913)
- Mohit Arora          (9914)
- Rahul                (9919)
- Nitesh Pathak        (9922)
- Pradeep              (9920)

## PC Based Touch Screen Imaplementation

This project is based on a screen frame specially designed for a specific task such as quizzes, debates etc. to perform or display at PC screen/monitor. It comprises of IR (infrared) transmitter and receiver circuit which gets activated when someone touches it (obstructed the IR light beam). As soon as the relay is activated when obstructed by the touch of a finger, the input pin gets a value and software performs the desired function through the microcontroller and the associated circuitry.

**Project Guide**

- Mr. Vinay Nasa

**Team**

- Neha Shakya          (9210)
- Vasundhara Singh     (9203)
- Pooja Adlakha        (9918)
- Meenu Rathi          (9211)
- R.Gaurav             (9244)

## RF Communication with Control System

RF Communications mission is to provide high quality telecommunications and data systems to our customers. Microcontroller based RF Communications is charged with the proper care and maintenance of our customers' telecommunications systems so as to provide maximum efficiency and usefulness. The major blocks used in the project include a Microcontroller (ATMEL make), RF transmitter, amplifier, filter, LCD display and requisite power supplies. The microcontroller collects the pulses received and displays the processed output on the LCD display.

**Project Guide**

- Mrs. Jyoti Dargan

**Team**

- Tarun Yadav          (9198)
- Tarun Gupta          (9196)
- Yogesh Goel          (9209)
- Varinder Singh       (9200)
- Dipender Panwar      (9921)

## Student's Viewpoint:

Dronacharya College of Engineering is one of the finest engineering colleges in Gurgaon. Electronics and Communication Engineering department has dynamic, dedicated staff and faculty members who not only quench our thirst for knowledge but also inspire and nurture the stamina we need to actualize our potential. This college has provided us a powerful blend of academic rigor with knowledge of various extracurricular fields like Robotics, Entrepreneurship etc. to cope up with the requirements of the industry. I feel blessed to be a part of this esteemed institute and department.

*Sameer Wasan (Roll No. 9180)*

Dronacharya combines Gurukul tradition with modernity. The college is known for its standards in imparting education, research and better placement. It has enviable infrastructure with spacious class rooms and well equipped laboratories. Our College has a canteen also which provides good quality hygenic food, snacks, soft drinks etc. Hostel facility is available for both girls and boys which include all necessary amenities. Dronacharya is playing a vital role in converting a student into a good human being as well as a good professional.

*Meenu Rathi (Roll No. 9211)*

*"Dronacharya College of Engineering is looking after overall development of its students."*

Dissemination of knowledge has not only been the sole objective of this institution. Dronacharya College is a source of learning for producing a galaxy of distinguished technocrats in all respects of public and professional life with vibrant and ever shining bright career perspectives.

*Shalini (Roll No. 10240)*

Dronacharya College of Engineering is an institute that has given us the total depth in knowledge about our respective courses. It is indeed gratifying to see that the students of ECE deptt have become efficient to face the global competition. Being a student of ECE deptt, I am also glad and fortunate about the faculty I got in the studies of my four years. I really appreciate the way they taught us and made us understand every subject so easily. Our training and placement office has done a lot for the students in respect of inviting companies or sending students to different colleges and industries for placement etc. I am proud to be one among Dronacharyans.

*Chitra Dhar (Roll No. 9117)*