



# DRONACHARYA COLLEGE OF ENGINEERING

## JANUARY NEWSLETTER, 2008

VOL III ISSUE XVIII

In This Issue ....

- Editor's Desk
- HOD's Desk
- Live Projects Undertaken By Students
- Student's Viewpoint
- On Sport's Front
- Placement Achievements
- Labs And Hardware
- Honours And Awards

ISSUE OF ELECTRONICS AND COMMUNICATION DEPARTMENT


From Editor's Desk :

**"Blow blow thou winter winds  
Thou art not so unkind  
As friends remembered not."**



Myriad - minded Shakespeare's above cited remark enables us to bear the brunt of the chilly, silly and wanton winds of this winter. Human spirit is strong enough to battle against the atrocities of Nature, if it is not enfeebled by our friends who betray us.

On the eve of the New Year we wish all associated with us, directly or indirectly, a year of the fulfillment of rosy Dreams, plentiful of peace and prosperity and above all the unflinching faith of friends, since friends of our bosom are more than our brothers. This issue of the News Letter marks the commencement of a new decade after the glorious achievements of our aims and aspirations in the sphere of technical education in the State and across its borders. Interestingly, the month of January has a linguistic, literary, cultural and ritualistic association with god Janus, a Roman god endowed with the privilege of two faces that enable him to look back to the past and look forward to the future. At this point of time all Dronacharyans, in various capacities, brood over the past aims and achievements wistfully and enthusiastically contemplate over the future plans to extend the kinetic ken of our ever broadening vision to new arenas and avenues in the fast gyrating sphere of our academic aspirations and philanthropic goals.

 Editor, (Dr. R. C. Narula)

From HOD's Desk :

The Dept. of Electronics & Comm. Engg is imparting the required technical and practical knowledge to the students . An effort is being made to groom these students not only to become successful Electronics & Comm. Engineers but also very good citizens of the society. The Dept. has well equipped laboratories with the latest of kits and equipment available so as to give practical hands on experience to our students. The equipment available in the labs are enhanced /upgraded as an on going process so as to keep pace with the latest developments in the field of Electronics & Comm. Engineering.



The Dept. makes efforts to ensure that knowledge of the faculty is also updated regularly by arranging **National Seminars, Faculty Development Programmes** in the college as well by sending them to attend seminars/ conferences at outside institutions. It is because we believe that a well-qualified and learned faculty is able to disseminate the knowledge to the students in a better way. Lectures on Personality Development, ethics / mannerism, confidence - building and conduct of group discussions by senior faculty helps our students to develop themselves into good, confident professionals so as to prove to be an asset to any organization they choose to work with.

 Head of the Department, (Prof. Satya Prakash)



## Live Projects Undertaken By Students :

### SMART HOME SECURITY SYSTEM

To overcome the theft and security problems we have developed this project named smart home security system. This project is designed to provide security through remote channel by using dial up line and control some of the home applications. This system contains different types of input sensors or detectors (like laser sensor, infra- red sensor, water level indicator and gas leak sensor) One 8051 microcontroller sensor senses the various levels and sends signal to microcontroller 8051. The microcontroller provides various output signals with the help of the program stored in it. The required output is shown on the display. Alarm circuit provides the alarm for various situations. Alarms are connected to laser circuitry, Infra red circuitry, Magnetic Brushes and Digital code lock on gates and windows.

Dial up circuit provides the remote connection to the telephone to control the remote application as well as call back features. This is a digital home security system and with voice feature which can monitor room temperature, smoke, motion, window and doors. Besides traditional magnetic switch equipped on doors and windows, we have also incorporated temp sensor, smoke detectors and motion sensor. Hence the security system will sound an alert when there is an attempt of break in or if there is possible smoke or fire. It incorporated a 16x2 LCD display with a 4x4 keypad. Each sensor can be enabled or disabled and alarm frequency can also be chosen by users. We have also equipped a voice playback chip and it will speak which sensor is wrong.



### AUTOMATIC MULTILEVEL LIFT USING MICROCONTROLLER

This project demonstrates the working of microcontroller by which working of lift can be controlled. The vehicles can be shifted with the help of lift. In this project parking building is shown circular. The vehicles can be parked in three stages:

- Ground Level
- Basement I
- Basement II

Along with the floor, the lift can be moved in East, West, South and North directions. The above features are achieved by auto scanning which means that the lift automatically checks the positions of floor and direction where vacant space is available. In this project two stepper motors with gear box are used. One stepper motor lifts the platform and the second stepper motor moves the platform circularly.

These two stepper motors are connected to the microcontroller through the inverter IC'S 4049. Once any vehicle is parked in the desired position, the respective LED becomes off. If some of the LED's are on, then it indicates the availability of parking space in the respective floors. The parking of the vehicle is done both by manual and automatic mode. The sensors in the lift are responsible to detect vacant space. This project can be used at any of the buildings or the parking space to park the vehicles.



*Student's Viewpoint About The Department :*



Dronacharya College of Engineering is set in an environment friendly sprawling lawns, spacious class rooms and labs and having atmosphere conducive to the development of the student's scientific temperament. Combining tradition with modernity, we learn the importance of our values and age old parampara of '**Gurukul**'. The Presentation and Seminars enable us to understand technical and non-technical topics at various stages which help to boost our confidence and understand the importance of good present ability. The practical training, undergone as a part of 2nd and 3rd curriculum, gives us an idea of Industry conditions and prepares us for the world, once we step out of the protective college walls. But the most important thing we have learnt in the four years at the college is that to achieve something, we have to aim high and settle for nothing less than the best. Besides this our prestigious college conducts the activities like Technofest, Sports week and Annual Day in which the students enjoy the functions which make all togetherness feeling. At the end I feel that I am enjoying my college with studies and extra curricular activities with pride in my mind for my college.

**Priyanka Kataria**  
(Roll No. 7165)



I am highly obliged to be a member of Dronacharya Gurukul. Each and every person directly or indirectly associated with the institution is a member of the family. The faculty members of the institution form the senior members of the family. The faculty is highly educated and hardworking. They put in dedicated efforts to uplift the overall performance of students. In addition to the academic field, efforts are being put by the faculty to improve the moral values of the students. Co-curricular activities relieve the strain and contribute to converting a student to a good and healthy citizen. The Placement Cell has turned out to be another feather in the hat. Students are being placed in reputed companies across the length and breadth of the country and even abroad. Thus in a nutshell, it can be said that this prestigious Gurukul does the duty of converting a raw student into a self dependent, sincere and a hard working technocrat as well as a good citizen.

**Pavitra**  
(Roll No. 7160)

***"Where there is Will there is Way "***



With this thought in mind, Dronacharya College of Engineering had been started in 1998 to provide technical education to the youths round the country. Today with its four pillars as branches, it is capable of bearing the onus of making meticulous technocrats. I am proud of my Institute as it has completed 10 years and grooming on the global way successfully. Electronics and Communication Department with its veteran faculty and industrious students always try to bring laurels to the college. I believe that the guru-shishya parampara of ancient days is truly followed in our Department. Highly experienced and painstaking Professors and Lecturers treat us as their own children and devote their valuable time to impart not only the technical knowledge but also the much needed social values to us. Under the guidance of H.O.D and senior faculty, our Department is leading to create history as our seniors are well placed in India and abroad as well. I have the proud privilege to present this view about my College and Department on the net. I am truly thankful to the college administration for providing me this great opportunity.

**Harsh Juneja**  
(Roll No. 7123)



Gurukul, is the exact word for our prestigious college which is on the way of getting Global success in Academic field. Our institute has become '**Beginner's Guide**' for all other institutions. Highly experienced and painstaking Professors and Lecturers treat us as their own children and devote their valuable time to impart not only the technical knowledge but also the much needed social values to us. Under the guidance of H.O.D and senior faculty, our Department is leading to create history as our seniors are well placed in India and abroad as well. Students undergo through different seminars and training and Project competitions which helps to boost up the confidence level in students. I have the proud privilege to present this view about my College and Department on the net. I am truly thankful to the college administration for providing me this great opportunity.

**Pradeep Sehrawat**  
(Roll No. 7162)

### On Sport's Front:

The sports week is being planned in the college campus from **25th Feb 2008 to 26th Feb 2008**. Various games and sports will be organized among students and faculty. Games like Volley Ball, Basket Ball, and Cricket are likely to be held and attended by students and staff in a large number. Various races will be organized as a part of sports activity. Tug of Rope between girl students will also be organized. The sports week will culminate on **27th Feb 2008** into a special function where the prizes will be distributed to the students by **Hon'ble Chairman Dr. Satish Yadav**. The winners of various sports will be awarded tantalizing trophies and scintillating shields during the **Prize Distribution Function**.

### Placement Achievements:

Some of the prominent companies visited our college as well as called our students for the placement during the year. Students of our college were selected during campus placement in following companies:

**Iflex, L & T Infotech, Globarin Systems & Solutions, Saurer Embro Dary Systems, Aricent, Infosys, Napino Auto Ltd., Live Business, Huawai Elect., Matrix, RT Outsources, Delta Energy Systems, Octopus Power Solutions, L & T Infotech etc.**

### Labs And Hardware:

In our constant endeavor to upgrade our labs, hardware related to different E&CE labs was procured to enhance the training facilities for our students.

The hardware procured included kits for:

Frequency Modulation Training, Transmitter and Receiver Training, Study of different theorems, Satellite Communications Training, Diode and Transistor, OPS Amplifier Training, Measurement of light intensity and Optical Transducer functions.

### Honours And Awards:

A number of students were given Cash Awards for the outstanding position in the University exams. They were presented the Awards by Chief Guest during the Annual Day Function on 27th Feb 2007.

The details are as follows:

Shilpi Bawa	V sem, 2nd position	Rs. 10,000
Braham Parkash	V sem, 2nd position	Rs. 10,000
Priyanka Kataria	III sem, 4th position	Rs. 3,000
Shilpi Bawa	VI sem, 4th position	Rs. 3,000

The following students also put up glittering performance in the recently announced results of odd sem:

- Shilpi Bawa, VII sem, 11th position
- Pulkit Garg, III Sem, 9th position