

DRONACHARYA COLLEGE OF ENGINEERING APRIL NEWSLETTER, 2007

In This Issue

- 1) Editors's Desk
- 2) HOD's Desk
- 3) Student's Projects
- Smart Home Security System
- Automatic Multilevel Lift Using Microcontroller
- 4) Student's Viewpoint
- **5**) Campus Placements Stats
- 6) Labs And Hardware
- 7) Honours And Awards

ISSUE OF ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT

From Editor's Desk:

The month of April comes as a luminous land-mark in the academic and the cultural calendar of the college. The much-awaited Convocation i.e. **Dikshant Samaroh** of last year's batch was held on 28th April, 2007 in the tastefully decorated Auditorium of the college. Degrees were conferred on the young graduate Engineers costumed in the ceremonial of owns and hoods. The Convocation was held in the midst of chanting of rituals in the true traditional spirit marked by motivational exhortation by the Hon'ble Chief Guest and by Hon'ble Dr. Satish Yadav the Chairman of Dronacharya Group of Institutions. The Dikshant Samaroh co-incided with the 'Bidai Samaroh'. It was really a commendable confluence of the Alumni of the by gone year, the finalists and those in the pipe-line heading towards their dream destinations. The stage set for the colorful cultural programs related to the Farewell, invited the peerless performers of the yesteryear too reviving the glorious, gorgeous and golden moments of the past. Hon'ble Chairman Sir and Hon'ble Principal Dr. B.M.K. Prasad wished the students to come back with flying colors. The function concluded with a sumptuous lunch for all in a true Dronacharyan tradition.



Editor, (Dr.R.C. Narula)

From HOD's Desk:

The Department of ECE is making sincere efforts towards the goal of providing quality education to our students. The Department is working towards this goal under the vision and guidance the Principal.



The University results of various semesters declared last month have been very good and have shown a rising due to untiring efforts of our faculty, staff as well as students. Two faculty members from the Department, **Prof Onkar Singh** and **Mrs. Dimple Saproo** have been honored with '**Best Overall Faculty'** Award and '**Best Faculty'** of the ECE Department respectively for the year **2006-07**. **Mrs. Asha Balara** was bestowed the '**Best Lab Instructor'** Award for the same period. The Department will continue to strive hard so as to produce good technocrats by providing them a blend of sound technical knowledge, and hands on experience in various labs of the Department so that they are able to prove themselves in the field. This year the Placement scenario manifests an unprecedented upward moment. What is really heartening is the Placement of students in advance. Students going to pass out in the next Session i.e. 2008 have also been placed with reputed Companies.



Head of the Department, (Prof. H. S. Dua)

Live Projects Undertaken By Students:



Bhavya Jain (6110)
Project Head

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, infrared 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 choosen by users. We have also equipped a voice playback chip and it will speak which sensor is wrong.



<u>Team Members</u> ECE VIII Semester

- 1. Aditya Juneja (6092)
- 2. Ashish Mittal (6107)
- 3. Audhesh Kumar (6108)
- 4. Aditi Bansal (6091)

Project Guide : Mr. Y.P. Chopra



Manish Yadav (5121) Project Head

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

Once any vehicle is parked in the desired position, then 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



<u>Team Members</u> ECE VIII Semester

- 1. Manoj Kumar (5123)
- 2. Umesh Yadav (5074)
- 3. Mohit Panwar (5127)

Project Guide : Mr. P. Patnaik

Student's Viewpoint About The Department:

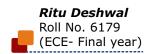


Dronacharya College of Engineering is set in an environment friendly sprawling lawns, spacious class rooms and labs and having atmosphere conducive to the development of the student's scientific temperature.

Combining tradition with modernity, we learn the importance of our values and age old parampara of **'The Gurukul'**. The ECE Department, as I have known it, has always encouraged its students to strive for the best in everything they do. Our respected HOD and all Faculty members are ever willing to help the students out of any problem academic or non-academic issues.

Besides, the Electronics and Communication Department has very well-equipped labs that help in understanding the theoretical concepts better. The computer labs with Internet access facility is indeed the most important and integral part of the Department. The entire staff of ECE Department is very cooperative and mindful of our needs.

The Presentation and Seminars enable us to deal with technical and non-technical topics at various stages. These help to boost our confidence and to understand the importance of good present ability. The practical training, undergone as a part of 2nd and 3rd curriculu, 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.

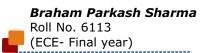




I am highly obliged to be a member of Dronacharya Gurukul. Each and every person directly or indirectly associated with the institution is a member of the family. The faculty members of the institution form the senior members of the family. The faculty is highly educated and hardworking. They put in 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 cap. 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 Dronacharya 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.





"The foundation of every State is the education of its youth"- Diogenes

With this thought in mind, Dronacharya College of Engineering, had been started in 1998. To provide technical education to the youth. Today with its four pillars as branches, it is capable of bearing the onus of making meticulous technocrats.

Electronics and Communication Department, with its veteran faculty and industrious students, always try to bring laurels to the college. I believe that the *quru-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 the H.O.D and the senior faculty, our Department is leading to create history as our seniors are well placed in India and abroad as well.

Lastly, 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 this great opportunity.

> Nilesh Gupta Roll No. 6157 (ECE- Final year)

Campus Placements Stats:

Some of the prominent companies visited our college as well as called our students for the placement during the month of March 07. Forty seven students of our college were selected during campus placement. The details are as follows:-

| Company | Date Of Interview | Location | No. Of Students Selected |
|------------------------------|-------------------|-----------------|--------------------------|
| Iflex | 05-Mar-2007 | LIET, Alwar | 02 |
| L&T Infotech | 09-Mar-2007 | LIET, Alwar | 11 |
| Globarin Systems & Solutions | 09-Mar-2007 | College Campus | 03 |
| Saurer Embrodary Systems | 14-Mar-2007 | College Campus | 04 |
| Aricent | 15-Mar-2007 | Jaipur | 08 |
| Infosys | 21-Mar-2007 | LIMAT Faridabad | 19 |

Labs And Hardware:

In our constant endeavor to upgrade our labs, hardware related to different ECE 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 give cash rewards for the outstanding positions in the **University Exams** in the previous year. They were presented the award by Chief Guest during the **Annual Day** Function on **27**th **Feb, 2007**.

The details are as follows:

| Shilpi Bawa | V Sem 2 nd position | 10,000 |
|--------------------|----------------------------------|--------|
| Braham Parkash | V Sem 2 nd position | 10,000 |
| 🗗 Priyanka Kataria | III Sem 4 th position | 3,000 |
| Shilpi Bawa | VI Sem 4 th position | 3,000 |

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

■ Pulkit Garg : III Sem 9th position ■ Shilpi Bawa : VII Sem 11th position



