



DRONACHARYA COLLEGE OF ENGINEERING

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ISSUE OF ELECTRONICS & COMMUNICATION ENGINEERING


From Editor's Desk :

The September 2009 issue of the News Letter tangently touches upon several developmental facets of DCE luminously highlighting an enviable evolution in some substantive spheres and events of substantive significance. The College entered its twelfth year of purposeful existence in the sphere of professional education marked by philanthropic attitude. With the advent of new aspirants of varied B.E. courses, DCE Farrukh Nagar, Gurgaon ascended to an aromatic adolescence heading towards new horizons of youthful yearnings.



The new session (2009-10) started with a bang. The freshers, with the freshest of faces, the rosiest dreams in their eyes and most fervent hopes hopping in their hearts further enhanced the growing glory of Dronacharya that stands head and shoulders above various other Engineering Colleges in the region and in the state of Haryana.

The University Results of the Even Semesters not only maintained the tradition of the myriad Merits but further catapulted the gorgeousness of the growing graph making the Management, the Principal, the Dean-Academics, HODs, the Faculty members and supportive staff proud of the enviable academic achievements.

 Editor, (Dr. R. C. Narula)

From HOD's Desk :

The last quarter has been full of activities in the department and the college. Six new faculty members joined the department last month.

There has been a Faculty Development Programme wherein the various faculty members gave presentations on topics of varied interest highlighting latest developments in key areas of technology.

An upgradation programme for various ECE labs was undertaken. The panels and boards of Electrical Technology Laboratory have been redesigned and got fabricated making these students friendly for operation.

The new batch of students joined the college on 10th Aug, 2009. A Fresher's Party was organized on 28th Aug, 2009 wherein a number of students from first year and seniors participated in the cultural programme.

Third and Final year students had their six weeks practical training in various Industries during the summer break, which gave them an opportunity to get themselves familiarized with the Industry environment .

The department is laying full stress on the '**Personality Development Programme**' capsule for the students so as to groom them for facing the interviews and improve their chances of placement.



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



Live Projects Undertaken By Students :

TELESCOPE CONTROLLER

This Project is designed to track the various positions of the sun using telescope (with the help of LDRs). The LDR senses the intensity of sunlight and sends the output to the microcontroller through ADC. The microcontroller compares the various intensities and directs the telescope to point towards the direction of sunlight having maximum intensity. The rotation of the telescope is controlled by motors. The value of the intensity of different LDRs is displayed on the LCD.

Team Members

- Neha Manchanda
- Shweta Khullar
- Sonal Aggarwal
- Varun Kamboj

PC OPERATED CAR USING RF LINK

This Project envisaged to develop a remote control car that would be controlled via RF Link. In this a hardware circuit is designed and interfaced with software running on the PC. The programming of the software has been designed in C++ language, which in turn gives command to the remote control car so that it can be operated accordingly.

Team Members

- Alvikta Tangry
- Aparna Mishra
- Manjit Singh
- Mohit Sardana
- Mohit Sharma

AUTO FAULT MANAGER

This project would cater to the needs of every basic industry without much investment and prevent hazardous industrial disaster similar to the one that occurred in Bhopal. It can sense several types of faults occurring in the industry, after detecting the leakage. It also maintains a database of the leakage for future reference and for compilation of statistics and improving the remedial action in certain cases.

Team Members

- Nidhi Sharma
- Rahul Gupta
- Ritu Sharma
- Shikha Gambhir
- Udit Kalia

WI-MAX

'World wide Interoperability for microwave access' (Wi-Max) is a wireless solution for providing last mile connectivity. Wi-max can be used in fixed as well as portable version. Wi-Max is able to provide wireless broadband connectivity in areas beyond the reach of traditional broadband with built-in quality of service (Qos).

Wi-Max technology can be used by Private Networks, Education Networks and Government Agencies for public safety and rescue operations in times of need. Wi-Max can play a key role in improving the broadband penetration especially in rural areas and providing e-Governance and e-Education in rural markets.

Wi-Max technology has an edge over other technologies, with better spectrum utilization and higher data transfer rate. Wi-Max can provide speed up to 14.4 Mbps and is likely to support much higher speed with further advancement. Due to the support for the higher speeds, wide coverage and ease of installation, Wi-Max is considered as one of the most promising technologies to provide high speed internet. Wi-Max today is the hottest and the most talked about technology because of its benefits such as cost effectiveness, time saving and the ability to transfer data from one place to another at a high speed.

DATA SECURITY

Network security is a very important and sensitive issue in today's scenario. In the run to make the society paper free, every organization is moving towards the centralised computer network systems. In such situations hiding important information from unauthorised agencies becomes very important to prevent various types of cyber and heinous crimes in order to make the human life safer than ever before. A network can be a local intranet or the internet. The security of a network can be threatened by both external and internal sources.

Security Threats: Some of the security threats to a network from both external and internal users are:

- Hacking
- Unauthorised access
- Virus attack
- E-Mail exploitation

Firewalls can be implemented in either hardware or software or a combination of both. Firewalls are frequently used to prevent unauthorized Internet users from accessing private networks connected to the Internet especially intranet. All messages entering or leaving the intranet pass through the firewall which examines each message and blocks those that do not meet the specified security criteria.

3-G (THIRD GENERATION WIRELESS NETWORK)

3G Systems will have the ability to receive live music, conduct interactive sessions and have simultaneous voice and data access with a number of users at the same time using a single mobile handset, whether while walking, driving or from home or office. This will be possible at much higher speed than presently available.

Technology - 3 G Systems:

- W-CDMA (Wide band CDMA)
- CDMA 2000

These systems promise:

- Multi-mega bit Internet Access
- Communication using Voice over Internet Protocols
- Voice Activated calls
- Unparallel Network capacity

Result :

The result of Final Year students (Batch 2005-2009) has been declared recently. The performance has been par excellence. It has surpassed all the previous records. **29% of the students achieved distinction.** In addition, the following students have been placed in the University Merit List:

S. No.	Name	Marks Obtained	Percentage (%)
1.	Rahul Gupta	4978/6060	82.1
2.	Pulkit Garg	4949/6060	81.6
3.	Kanika Vashist	4886/6060	80.2

Industrial Visit :

An Industrial visit of VII Sem students was organized on 24th Aug, 09. The Students visited Air Force Station, Tuglaquabad wherein they were shown the workshops dealing in various radars.

Student's Viewpoint About The Department :



DCE is like a Gurukul. The college environment is very peaceful and the students here are well disciplined. This discipline is for grooming the personality of students.

This college is prospering and excelling year after year. Our College encourages students in co-curricular and technical events. The college has schedule for '**Tech Fest**' every year. The College has also started '**Entrepreneurship Development Cell**'. This is encouraging and is a step towards establishing own ventures and be successful entrepreneurs.

I attended the workshop on Entrepreneurship and I have gained a lot out of it. The college has very helpful and courteous faculty members. I feel confident that after completing B.E., I shall be highly successful in my life.

Sameer Wasan

(Roll No. 9180)



I, student of 7th Sem in Dronacharya College of Engineering has been here for 3 years and the academic environment in the college has been invigorating right through the years. Labs and class rooms are well equipped with the latest gadgets to improve the quality of education. Recently, many clubs have been established to focus on the overall development of students, and this will surely help them in the near future and will also give an edge to them in this competitive environment. Cultural programmes are also organized to uplift the talent of the students.

Saurabh Chauhan

(Roll No. 9184)



I, Final Year student of Dronacharya College of Engineering, feel pleased to express my views on Dronacharya family. This college has provided me the platform required to become an efficient Engineer and to join the elite group of would be great technocrats. The faculty has always provided us technically sound knowledge which marks excellence and will make me achieve bright future career. These are some factors like Discipline, Technical Programme and well equipped practical Labs, which will give me full confidence by the time I pass out from this college.

Deepak Kapoor

(Roll No. 9916)