

Echelon Institute of Technology

Kabulpur, Jasana-Manjawali Road, Faridabad-121101 Affiliated to: M.D. University, Rohtak & Approved by A.I.C.T.E Phone – 0120 4316106, 0120 4312260 Web site: www.echeloninstitute.com

COLLEGE PROFILE

Established in the year 2007, Echelon Institute of Technology, Faridabad has taken rapid strides. Just in a short span of three years, Echelon has carved a proud place for itself among the renowned technical institutions. The Institute is situated on Kabulpur-Jasana-Manjawali Road, Faridabad on a sprawling campus measuring 17.5 acres.

Echelon is the only Technical Institute in Haryana which has the distinction of admitting students with a minimum of 65% aggregate marks in the qualifying examination. Echelon Institute of Technology offers the following courses:

- 4-Year Under Graduate Program
 - o Computer Science & Engineering (CSE)
 - Electronics & Communication Engineering (ECE)
 - Information Technology (IT)
 - o Applied Electronics and Instrumentation (AEI)

ELIGIBILITY & ADMISSION (B. TECH FOUR YEAR PROGRAM)

65% marks in aggregate in qualifying examination of 10+2 or its equivalent examination.

DEPARTMENTS

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

The department has excellent infrastructure and centrally air-conditioned labs with state-of-the-art information technology, to mould the students into technically competent and highly qualified software professionals. Apart from exposing the students to core computer subjects like compiler design, design of algorithms, object oriented programming, DBMS, microprocessors, computer networking, computer security, genetic algorithms, data mining which make the curriculum industry oriented. The department has Programming Lab, Multimedia Lab and Operating System Lab, equipped with latest software C++, Visual studio, SQL server, Adobe and Red Hat Linux.

DEPARTMENT OF INFORMATION TECHNOLOGY

The Department aims to deliver the IT academic courses relevant to changing needs of Industry, advance the state of knowledge, application of IT through fundamental and applied research. Also the Department has **Programming Lab**, **Multimedia Lab** and Operating System Lab, equipped with latest software C++, Visual studio, SQL server, Adobe and Red Hat Linux.

DEPARTMENT OF ELECTRONICS AND COMMUNICATIONS

Apart from a good foundation in electronics, the Electronics and Communication students are provided in-depth knowledge to design, fabricate, maintain, supervise, and manufacture electronic equipments relevant to entertainment media, health care, IT industry, communication and defense. The students work with microprocessors, microcontroller and fiber optics for applications in **automation**, **communication** and **multimedia**. Hence the department has established its own computer lab with latest configuration hardware and most required software like MATLAB, P-Spice, Xilink etc. Digital System Design laboratory equipped with FPGA, CPLD, CAD tools and boards with Xilink. In the Embedded system design lab students learn assembly level and high level programming on the Atmel 8051/8052, Atmel AVR, PIC microcontroller boards and tools. 8085 and 8086 microprocessor simulator kits and boards are the basic features of the microprocessor lab. Control system lab, Instrumentation & Measurement lab, Communication lab, Analog lab, Digital lab, Network lab, Electrical Technology lab, Electrical Machines lab etc. are present which provides students with real time knowledge. Department has the facility of PCB design with modern technology based machines and design software where students can design, simulate, fabricate and test their circuits for their projects.

INFRASTRUCTURE

Echelon, in its constant pursuit of offering quality education, has created excellent infrastructural facilities and established certain advanced laboratories (CISCO-Networking Lab, VLSI Design Centre, Embedded Systems, DSP, CAD/CAM and GIS) dealing with contemporary technologies. The Phonetics Lab, the Interactive Communication Lab and Reading Room were set up, much before it was made mandatory by the University, to improve the communication skills of the students. Recently the English Language Lab is upgraded to Multi media Lab.

300 systems with latest configuration including 274 in college main computer center are networked through **LAN**. **10 mbps internet connectivity** allows students and staff to access the Internet from anywhere in the campus.

The College has a Central Library with 15000 titles and 64,650 volumes. The College also subscribes to 76 National Journals and 21 International Journals. Echelon also subscribed to the on-line journals published by Professional Bodies like Institute of Electrical & Electronics Engineers (IEEE), American Society for Mechanical Engineers (ASME) and American Society for Civil Engineers (ASCE). College is also a member of Delhi Library Network (DELNET).

The library operation and services are fully computerized with "Redox EIMS System" Bibliography records of Library holdings can be accessed through the Redox on Line Public Access Catalogue (OPAC). The library also maintains a good collection of useful educational CDs/DVDs on Engineering & Technology.

A book-lending scheme offers the full set of text books to the students with a nominal annual payment. The College encourages participation of students in sports, games, technical seminars and cultural activities. Our students and staff participate in intercollegiate and national level contests.

NPTEL COURSES

To reinforce the technical knowledge of the students, college has purchased the courseware from **National Project on Technology Enabled Learning (NPTEL)** developed by IITs and IISc and given free access through internet to all the faculty and students.

DIRECTOR

Dr. Sudhir K. Agarwal joined Echelon in July 2009. He has returned to India after spending more than 30 years in Canada and USA. Having worked in industries and having managed and launched software related companies in USA, he is very focused on producing engineers who also gain practical knowledge. As an example, he has made it compulsory for every student to write additional 100 computer programs, spread over 4 years period and with increasing complexity, to get a good grasp of algorithms and become familiar with software development by writing/debugging programs in various languages such as C, C++, C# and Java. He believes in igniting that spark in the minds of students that make them realize that knowledge gained with good values such as sincerity, dedication, hard work and honesty is the only key to having a happy professional life after they graduate.

FACULTY

The College has 78 highly qualified and experienced faculty members including 9 **Ph.Ds**. Four Adjunct Professors, viz., Prof. (Dr.) Sudhir K. Agarwal, IIT Roorkee, Prof. (Dr.) S.K. Gupta, IIT Delhi, Prof (Dr.) Mrs. Keya Dharamvir, IIT Kanpur, Mr. Prabhat Aggarwal, IIT Delhi, Mr. Deepak Mittal, IIT Delhi, Prof D.K. Chugh, Dean Admn, Prof (Dr.) D. Singh, Professor in-charge.

LECTURE SERIES

Echelon has initiated a lecture series program under which eminent personalities from the field of academia and industries and invited to deliver their enlightening talks, present papers, or make Power point presentations. Some of the recent lectures are as follows:

Scientist with a difference

Prof. Yashpal, the Grand old man of science, was the first to inaugurate the series. He elucidated the intricate and complicated scientific issues in a commons man's language.

Adobe-Innovation Embedded

Dr. Naresh Gupta, CEO of ADOBE, India highlighted the various facets of "Making an organization". He shared his personal experience in establishing "Adobe India".

Metro-Faster Traveling made simple

Prof (Dr.) K.S. Rao, IIT Delhi, delivered a lecture on "Geometrical Evaluation & Analysis of Delhi Metros Tunnels". The session gained huge appreciation as the faculty and staff gained invaluable knowledge on such a complex subject.

Electrons Unleashed

Echelon Institute organized a workshop on "Basics of Electronics & Communication and its scope" in which Prof (Dr.) B.S. Panwar & Prof. (Dr.) S.D. Joshi, both from IIT, Delhi were eminent speakers.

STAFF DEVELOPMENT PROGRAMME

With a view to strengthening the teaching-learning process and quality improvement, College has introduced staff development program. The faculty members are encouraged to attend/participate in seminars, conferences, short term courses and also present papers at Seminars and Conferences.

The College also encourages faculty to pursue their higher education while in service by providing assistance in the form of academic leave, reduction in their class work etc.

VALUE ADDED COURSES:

In order to strengthen the teaching-learning ambience and to prepare the undergraduates to meet the challenges of the global work environment, Echelon has taken up several initiatives like offering value-added courses (CISCO Networking, VLSI Design, Embedded Systems, J2EE, CAD, CAM, FEA, GIS, STAAD and Wireless Communication) and interfacing with the industry to bridge the gap between the curriculum and the requirements of the industry.

Incidentally, Echelon happens to be the first institution in the State to establish such advanced laboratories, including language laboratories, and to offer the value-added courses.

PARTNERSHIPS:

With a view to provide experiential learning and expose the students to the emerging trends and contemporary technologies in the industry, the College has forged useful linkages with various corporate houses.

R & D AND CONSULTANCY CELL

Echelon has an **R & D and Consultancy Cell** in the Institution to encourage the faculty and students to carry out innovative and research oriented project work, relevant to industry.

MERIT AWARDS

To encourage merit and to develop competition among the students, Best Academic Performance Awards are given to top 3 students of each section, for all the courses, based on their performance in the University Examination in the preceding year.

Best Project Awards are given to final year students to encourage innovativeness to carry out and present creative and research oriented projects relevant to their respective fields of engineering.

Best Attendance Awards are given to all those students who have secured **100%**, **99%** and **98%** of attendance in the preceding academic year.

GOLD MEDALS

Echelon Institute of Technology has instituted Gold Medals to the toppers of each discipline based on their cumulative performance (from 1st year to final year) in the University Examinations. In addition, Gold Medals have been instituted by industry partners, alumni, parents and individuals.

We also recognize the University 1st ranker by giving a silver plaque and a cash award, besides Gold Medal

MERIT-CUM-MEANS SCHOLARSHIPS

In addition to the above initiatives, the Management of Echelon Institute of Technology is providing Merit-cum-Means Scholarships to the needy students for their academic improvement.

PROFESSIONAL PRACTICE SCHOOL

To expose the students to the industrial environment, the college has introduced Professional Practice School to associate 2nd year B.E. students with an industry during their summer vacation.

STUDENT DEVELOPMENT PROGRAMMES

To equip the students with the skills matching with industry requirements/expectations and to face the process of selection for placements, a 6-week structured training program is conducted during summer vacation to the 3rd and 4th year students.

PROCTORIAL SYSTEM

For close monitoring of the academic progress and holistic development of our students, Proctorial system was implemented. Under this System, students are kept under the care and guidance of our faculty members.

SUMMER INTERNSHIP AND TRAINING

Some of the companies where the Students have done summer internship are: CRIS, Siemens, Escorts, QA Infotech, NTPC Ltd., HCL Info systems Ltd., Idea farms, BSNL, Airtel, NHPC, Unisoft Technology, UFles Ltd., Aricent, Havells, Century, Metal Recycling Pvt. Ltd., Doordarshan Kendra, Prasar Bharti, Gemco CONTROLS Ltd., Parsawa systems Pvt. Ltd., HCI Technologies Ltd., AVM, Bharti AIRTEL, TATA CUMMINS Ltd., Vee India Retail Pvt. Ltd. Universal Software Corporation, Matrix Cellular Services Pvt. Ltd., Ashoka Sales Pvt. Ltd., Vodafone, Essar, Whirlpool, Yahama Motors, Delta Power Solutions (I) Pvt. Ltd.