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Government of NCT Delhi
DELHI COLLEGE OF ENGINEERING
Kashmere Gate, Delhi - 110 006

Prof. P.B. Sharma
Principal

PRINCIPAL'S COUNCIL

1. Prof. P.B. Sharma, Chairman, Principal Council
2. Prof. M. Paldas, Dean, Faculty of Technology
3. Prof. J.K. Das, Dean, Continuing Education
4. Prof. N.L. Sachdeva, Dean, Students' Welfare
5. Prof. A.K. Sinha, Dean, P.G. Studies
6. Prof. V.K. Mahna, Dean, U.G. Studies
7. Prof. N.L. Sachdeva, HOD, Mechanical Engg.
8. Prof. C.L. Wadhwa, HOD, Electrical Engg.
9. Prof. Arun Kumar, HOD, Civil Engg.
10. Prof. A.K. Sinha, HOD, Electronics & Comm. Engg.
11. Prof. D. Roy Choudhury, HOD, Computer Engg.
12. Prof. Anand Sachdeva, HOD, Prod. & Industrial Engg.
13. Prof. J.C. Bhatia, HOD, Applied Mathematics
14. Prof. R. Chandra, HOD, Applied Chemistry
15. Prof. Anand Sachdeva, HOD, Training & Placement
16. Shri D.K. Srivastava, HOD, Applied Physics
17. Dr. R.C. Sharma, HOD, Humanities
18. Dr. G.L. Verma, Officer in Charge, Part-time Section
19. Shri J.S. Kalra, Office in Charge, Central Workshop & Proctor
20. Shri D.R. Mishra, Stores Officer
21. Dr. K. Singh, Dy. Admn. Officer
22. Shri S. Narain, Project Officer
23. Sh. R. K. Shukla, Librarian

Special Invitees

1. Prof. A.L. Agarwal, Emeritus Fellow, AICTE
2. Dr. A.K. Saluja, Chairman, Cultural Council
3. Dr. J.S. Brar, Chairman, Sports Council
4. Dr. A.K. Srivastva, Director, Physical Education

1323 DA/96—1

CONTENTS

DELHI COLLEGE OF ENGINEERING

55 Years of Dedicated Service To The Nation

PROF. P.B. SHARMA
PRINCIPAL

Delhi College of Engineering is one of the oldest technical institutions in our country. Established in 1940, originally as Delhi Polytechnic functioning under the direct control of Government of India, the college is presently under the Government of National Capital Territory of Delhi (Delhi Administration) since 1963 and is affiliated to the University of Delhi since 1952. The first batch of admissions took place in 1941. The college celebrated its Golden Jubilee in 1991.

This college has been instrumental in the planning and execution of technical education in our country from the very beginning. The founder Principal of the college, Prof. W.W.Wood, was the chairman of Wood & Abbot committee which laid the foundation of the pattern of technical education in India. Over the last five decades ,this college has made significant contributions to the development of relevant manpower to meet the needs of scientific and industrial advancement of our country. It is indeed a matter of great satisfaction to all of us in the college that **in a 1990 survey sponsored by the Department of Science & Technology, Government of India, on the competence of engineering institutions in producing relevant manpower for industries, this college has been ranked no. 2, next only to The University of Roorkee, amongst the high ranking institutions, other than the IITs.**

A distinct feature of our academic programme is a focus on the industrial needs of our country. The students are given an optimal mix of analytical and practical knowledge, enriched by industrially oriented training and project work. The graduates are thus motivated to serve the industries and R&D organisations in India.

The college has always been proud of its alumni who are mostly occupying positions of great responsibility and distinction in Industry, Defence Services, Government Organisations, Educational and Research Institutions in India and abroad. This recognition of the

college mainly owes to the efforts of our well qualified and dedicated faculty and the technical supporting staff who year after year provide quality technical education to our bright undergraduate and postgraduate students.

Presently the college caters for **10 U.G. degree programmes** which include 6 full-time B.E. courses in Civil, Mechanical, Production & Industrial, Electrical, Electronics & Communication and Computer Engineering, besides 4 part time B.E. Tech. evening courses to practising diploma engineers. The college also offers 10 **full time P.G. programmes** leading to M.E. degree in different branches of engineering. In addition, a few part-time P.G. courses are offered to in-service engineers and professionals in and around Delhi. To keep abreast with the latest advances in specialised areas of Science & Technology, the college also caters for Ph.D. level research programmes under the Faculty of Technology of the University of Delhi. The present intake to our full-time B.E. programmes is 320 and it is proposed to increase to 425 by the end of the Eighth Plan period. It is also proposed to add six new P.G. courses in the coming years to cater for new and emerging areas of S & T, besides **full-time Ph.D. Programmes in specialised areas.**

The college presently has 9 academic departments besides a separate department of Training and Placement.

Department of **Mechanical Engineering** which has been with the college from the very beginning has seen a considerable growth in as much as that its original intake of 30 at UG level in 1952 has risen to 100. The department is also offering M.E. degree level programme since 1972 in Production and Thermal Engineering besides catering for Ph.D. research programmes. The department has well equipped laboratories such as Instrumentation, Experimental Stress Analysis, Strength of Materials, Fluid Mechanics, IC Engines, Refrigeration and Air-conditioning and Automotive Engineering.

The Department of **Civil Engineering** caters for 70 UG students besides offering PG degree level programmes in Hydraulics and Flood Control, Structural Engineering and Environmental Engineering and Ph.D. level programmes in selected areas of specialisation. The post-graduate programme in environmental engineering has been with the college for the last 20 years and has contributed significantly to the

manpower development in this highly relevant area of national importance.

The Department of **Electrical Engineering** has seen a significant growth over the last 55 years specially because of the rapid advances in Electronics, Communications and Computer Engineering. The Department has been trifurcated into its three constituent departments viz. **Electrical Engineering, Electronics & Communication Engineering and Computer Engineering.** From an intake of 30 in 1952, the department today caters for 70 UG students in Electrical Engineering, 40 in Electronics and Communication Engineering and 20 in Computer Engineering. In addition to UG programmes, the department offers M.E. Courses in Controls and Instrumentation, Electronics and Communication and Power Apparatus and Systems. Ph.D. level research is also carried out in frontal areas of Technology. The department has well developed laboratories for use of UG and PG students and research scholars. A special feature of the department is its Microwave and Communication laboratory having Optical Fibre facilities. The power system and control laboratories are equpped with sophisticated equipment and test set-ups for research in the area of high voltage engineering. The department faculty and students have developed a number of instruments in collaboration with leading R & D organisations, notably intelligent communication controller for IBM pc-XT with C-DoT and high voltage breaking system.

Considering the rapid advances in manufacturing technology and production systems, a new department of **Production and Industrial Engineering** emerged from the Mechanical Engineering Department in 1988. The department offers UG level programme in Production and Industrial Engineering, besides offering PG programme in Production Engineering. The department has well equipped modern laboratories which include robotics, welding technology, automation and Flexible Manufacturing System (FMS). The department lays considerable emphasis on Institution-Industry Interaction through organisation of short term courses for practising engineers and industrial projects.

Departments of Applied Sciences in the college offer PG level programmes besides providing a sound science base for engineering disciplines. The department of **Applied Physics** offers an M.Sc. course in Applied Physics. The course has been specially designed to meet the

requirements of the scientists working in the laboratories and industrial organisations. Major emphasis in this course is laid on Material Science, Electronics, Applied Optics and Instrumentation including Ultrasonics and Vacuum Technology. The department has facilities for research work in the area of thin films.

The Department of **Applied Chemistry** has contributed significantly to higher education and research in the area of Polymer Technology. It has well equipped and modernised laboratories in polymer processing, polymer testing and polymer synthesis. The Department closely interacts with the industries, R & D organisations and professional institutions. The department offers a M.E. level course in **Polymer Technology** which is especially designed to meet the requirements of plastics and rubber industries.

The Department of **Applied Mathematics** imparts instructions to UG and PG students of the various engineering disciplines and caters to their needs in the areas of Applied Mathematics, Computational Techniques and Computer Applications. Beginning with the current academic session, an inter-disciplinary programme at the post-graduate level, M.E. in Computer Technology and Applications, will be offered by the Department. This course has been specifically designed to meet the requirements of the industry in the area of software engineering and computer application. Built around Digital-3000/800 and HP-9000/560 and Pentium servers, a lab equipped with the latest state-of-the-art facilities exists in the Department.

A distinct feature of our academic programmes is that the students are given a considerably high exposure to practical aspects of engineering in the laboratories and also through Industrial training. Often the experts from the industry are invited to deliver specilalised lectures in the UG and PG classes to present before the student community the problems facing the industry which require technology solutions. The idea is to enthuse students to the vast horizons of engineering and technology sectors which await their innovative and creative contributions. A number of Industry oriented projects have been undertaken both at UG and PG levels by the students of the college. The faculty members have also undertaken R&D projects sponsored by the government and private agenices. A number of instuments have been developed by the students and faculty of college. Some of these are Digital Message Broadcasting Machine, TTL

Digital Hardware, Intelligent Communication Controller, Fatigue Testing Machine, High Sensitivity Light Scattering Photometer, Actinometer and Utltrasonic Diffraction Photometer. The faculty of the college has also offered consultancy services to industries and to a number of Government and Private organisations.

The importance of **post graduate education** cannot be undermined in the context of expansion of specialised knowledge which is currently taking place in the Science and Technology sectors and its intimate relationship with the requirements of the industries. The learning process, therefore cannot be terminated at under-graduate level if the nation has to enter into the arena of innovations and creativity beyond the expectations of a common man. It is in this respect, the contribution from the post-graduate courses is to be seen as a support mechanism to the growth of specialised workforce as well as for the generation of the intellectual property for the nation. The post-graduate courses also hold the key responsibility of addressing to the fast changing and newly emerging needs of the nation. The college presently offers 10 post-graduate programmes covering various specialised areas of engineering, technology and applied sciences. These include post-graduate programmes in frontal areas such as Microwave Communication, Controls & Instrumentation, Computer Technology and Applications Polymer Technology, Environmental Engineering, Structures and Hydraulics & Flood Control. A new M.E. Course in Computer Application and Technology is starting from this year (1996-97) with the approval of AICTE and the University of Delhi.

Research & Development, being kingpin of technological advancement, is a priority area in an institution like ours. Renewed thrust has been provided to make Research & Development an integral part of the academic and research activities of the College. Computational laboratories have been established in the academic departments to cater for the requirements of post-graduate education and doctoral research. During the last three years, sophisticated equipments such as, Image Processing Unit for Digital Communication Laboratory, Element Analyser for Polymer Science Laboratory, Work Station for surveying and an advanced Computational Laboratory, housing 20 PC 486 computers and a work station for fast computing, have been set up to remove obsolescence in

the laboratories. Special care has been taken to provide computational facilities in all departments, considering the inter-disciplinary nature of this area and its importance to modern day engineering. Besides the laboratories, the College Main Library has been systematically strengthened during the last 3 years. The main library today houses over 80,000 books in addition to 15,000 in the book bank. The College Library also subscribes to 100 leading research journals to support its research and development activities.

The **capacity utilization** of the infrastructure at the college is indeed highly satisfying, especially that the college functions right from 8.30 a.m. in the morning to right up to 9 p.m. in the evening on all working days. It offers 4 part time B.E.(Tech.) degree programmes to the practising engineers of the National Capital Region, which are conducted in the evenings. Delhi College of Engineering is, therefore, firmly committed to continuing education of the practising engineers of the city. The need for organising short term Refresher Courses for the teachers as well as for practising engineers has also been recognised. Last year the College has conducted **two UGC sponsored Refresher Courses** in the specialised areas of Polymer Technology and Environmental Engineering & Sciences. In addition, the College has a Continuing Education Cell, supported by the Ministry of HRD to support the national effort of preparing the resource material for upgrading the knowledge and skills of the practising engineers. In this effort the college has contributed 23 course materials for advancement of educational and training needs of the engineers in the industries.

We are in the age where the learning process has to continue beyond degrees, post-graduate degrees or even doctoral degrees, as the knowledge itself is becoming out-dated almost every two to three years because of the phenomenal growth of knowledge in the emerging-science & technology sectors. The college has taken up organisation of short term courses, seminars, workshops and panel discussion on a regular basis. During the last three years, the college has organised 30 such programmes for the benefit of both the teachers of other engineering institutions as well as the practising engineers from the industries. Our **focus on continuing education** programmes during the last one year has been on Quality Assurance, Value Engineering as well on specialised areas such as Advances in Polymers & Composites and Environmental Engineering. These

programmes have been targetted towards the review of the state of art with the objective of providing a vision for the future course of developments. Environmental pollution control is and would continue to be one of the special thrust areas for our institution's educational programme to improve the level of environmental awareness, an essential pre-requisite to meet the challenge of sustainable development. Further, the College has organised a National Programme on **Management of Environment'** in February 1994 which was inaugurated by the Hon'ble Minister for Development and Education. This Programme was participated by over 100 participants from all over India and was addressed by eminent technologists from the industry and the institutions of higher learnings.

Another programme of vital importance to the growth of quality technical education, namely, **Orientation Programme for the Newly Appointed Teachers'** has also been undertaken by the college during 1993-94. This activity has ensured a much greater appreciation of teaching profession as also enthused the younger ones in the faculty to continue to aspire for excellence. Vice Admiral G.M. Hiranandani, Hon'ble Member, UPSC, inaugurated this Programme in January 1994. The Production Engineering Department has organised **Autocad Release 12 and Autocad Designer programmes** in June and October 1994 for the faculty and the students. A 3-week long Induction Programme for engineering college teachers, sponsored by AICTE, was conducted jointly by DCE and CPDHE, University of Delhi in March 1995.

A college such as ours which has remained active in the technical education arena for the last over five decades has to rightly focus its attention on the future of technical education in the country, especially in the emerging environment of global competitiveness and the requirements of human resource development. The college has, therefore, played its role at the national level by organising expert discussions and programmes on the emerging trends in higher technical education. It has also taken strides into reviewing the management philosophy of higher technical educational institutions. Recently, it has played a leading role in organising a National Programme on **Total Quality Management in Higher Technical and Managerial Education System'**. The entire management philosophy of higher technical and managerial institutions has to undergo a

significant change in its perspective so that we do not merely teach quality, productivity and efficiency but we also provide an environment within the four walls of the institutions of, a quality culture, a productivity linked operating system, and an efficient administration to serve the larger interests of the community. Excellence in higher technical education has become recently more relevant, specially because of the call for the practice of total quality. The college has played its leading role in the organisation of the national seminar on Excellence in Higher Technical Education jointly with Department of Training and Technical Education, Government of Delhi.

The academic programmes at this college have been revitalised by improving our interaction with the industry. An element of expert lectures by practising technologists has become a regular feature in our academic programmes. It has also been our effort to motivate at least 20 to 30% of undergraduate and post-graduate projects to address to the problems of direct value to the industries. Over the last two years there has been a major success in this regard. We have also been able to enthuse our under-graduate students to take up problems of national interest, such as; Utilisation of Compressed Natural Gas for automobiles, Indoor pollution Monitoring and Control, Modelling of Pollution Dispersion from the automobiles, development of New Refrigerants to eliminate the damaging effects of present day Freons, development of Computer Aided strategies for electrical utilities, Software for Expert Systems for manufacturing applications, Software for Energy Analysis of Combined Cycle Plants, Development of Polymer Composites for high temperature applications, development of conducting polymers and technology development for hydrogen production from organic waste, using bio-technology, to name a few. These projects besides reinforcing the faith of our students in the knowledge acquired in the institution have enhanced their capabilities of solving some of the problems pressing the Indian people today.

Another major exercise, which has recently been taken up by the College, is the **Curriculum Innovation.** With rapid advances in Science & Technology, the fast decrease in half-life of knowledge acquired and with the emerging demands for flexible human resource development, it has become absolutely essential to restructure the course curriculum, design course structure to be

to strengthen the inter-disciplinary component in engineering and technology courses. At the same time, a sound science base of modern engineering is to be provided. Care and concern for society and environment has to become a core component of the engineering curriculum so that the engineers of today as well as the engineers of tomorrow become more responsible to the society to which they belong. They, then in true sense, will be the pillars of strength of the economy and will be the prime movers of growth and development in the today's science and technology driven economy.

As many as 40 candidates who are already employed in educational institutions and research establishments, have registered for their doctoral degree at the college under the Faculty of Technology, University of Delhi. This, we believe, will be a major factor in augumenting our facilities towards a greater utilisation for research and development, to provide an orientation which is necessary to enthuse the younger minds at under-graduate and post-graduate levels to inculcate the spirit of innovation and creativity beyond the class rooms and the laboratories. This year, 15 full time Ph.D. scholarships are being made available. The faculty members who guide the doctoral research scholars will also be the major benificiaries as they will have an opportunity to enhance their contribution to the creation of intellectual property.

The employment scene of our graduates is highly satisfying. More than 80% of our students are placed in jobs through campus interviews while the remaining acquire placements in higher studies and jobs by their own initiatives. As many as 80 industries including TCS, Telco, Tisco, L&T, Maruti Udyog Ltd., NIDC, SIEMENS, HCL HP, ABB and Tata Consultancy Services have visited the college for campus interviews.

The alumni of DCE have added to the pride and prestige of this premier institution. They have excelled on all fronts including industries, the corporate sector, the govt. service as well as entrepreneurs. Shri K.L. Chugh, former Chairman and Managing Director of ITC Ltd., who was rated as the top Corporate Executive of the year 1993-94, is a graduate of this College of 1960 in Mechanical Engineering. Shri J.B.S. Baxi, Chairman & Managing Director of Uniplas India Ltd. is also an alumnus of this College. It is also indeed a matter of high pride for DCE fraternity that Shri Vinod Dham, the world renowned computer specialist and the inventor of *pentium chip*,

which has made the foundation of the next generation of microprocessors, is an alumnus of this College. These are only a few names to mention. The list of our distinguished alumni is, undoubtedly, long enough, commensurate with our most impressive history of 55 years. The College has organised an Alumni Meet in November 1995 and has awarded distinguished alumni awards besides felicitating and honouring its former faculty members which included among others, Prof. B. Sanyal, Professor of Art, Prof. J.N. Moudgill, formerly Principal of DCE and former Programme Director of IIT Delhi and Prof. P. Kundu, formerly Professor and Head, Electrical Engineering Dept. and presently Emeritus Fellow at DCE.

The college student community continues to add to the pride of their alma-mater. Four years ago, We had taken a bold initiative to implement **examination reform**. The New Examination Scheme also brought a greater commitment to teaching learning process by the faculty as well as the students. It has also cut down the bureaucracy and has provided us a reasonable degree of autonomy in the conduct of the examinations. The beneficiaries of this reform have truly been the students, who have had their academic schedule being adhereed to as scheduled and thus, we were able to make up for the loss of over one semester with which we were lagging behind, when the present Principal took over in 1990. This year, the final year results would be announced as per schedule and our graduates have been well placed in the industries and in higher education. It is by no means a small success, specially, when the scene in this country, barring the IITs and the national institutions is that of delays and confusion. The success of the New Examination Scheme has been primarily because of the establishment of the **Examination Cell** at the College which is headed by Prof. V.K. Mahna, Dean of Undergraduate Studies. The Examination Cell has been the hub of all activities associated with the examination work, carried out in the College. During the period of last four years, eight Mid Semester Examinations and eight End Semester examinations have been conducted. Each of such examination requires, on an average, preparation and final printing of 80 question papers. Execution of an assignment of such a magnitude, involving 640 question papers, their evaluation and tabulation, could not have been possible without the spontaneous support and cooperation of faculty and the relentless efforts of Prof. V.K. Mahna and his team.

comprising of Shri Sagar Maji and Shri D.R. Gupta. Examination Cell of DCE can, today, legitimately claim to be an independent, exclusive and richly-equipped office automation and computational centre. Besides streamlining the academic schedule, the last four years have also been targetted to re-orienting the student community towards a greater commitment to studies and extra-curricular activities. The students of this College have exhibited exemplary performance both in studies as well as in professional and cultural activities. It is a matter of high pride for us to note that **Shri Harshvardhan Chugh, a graduate of 1992 Civil Engineering, has topped in the Indian Engineering Services - 1993** Examination, conducted by the UPSC. The honour of DCE has been enhanced and our pride has further been enriched by **Shri Pawan Kumar Sharma, who has received the President of India - Dr. Shankar Dayal Sharma, Gold Medal** for his being adjudged as the **Best Student of University of Delhi** for his allround performance in studies, extra-curricular activities, conduct and character. This award is all the more important as it is awarded to only one student out of approximately one lakh registered in 66 colleges, affiliated to University of Delhi. In fact, all the gold medals and prizes of Faculty of Technology have been bagged by the students of DCE for the last five years.

The College faculty and students interact with a number of professional bodies both at national and at international levels. DCE has five students chapters of the world renowned professional bodies, such as, ASME, SAE, ASHRAE, IEEE and IEE. DCE is the only institution in India which has attained the distinction of having students chapters of all these internationally acclaimed professional bodies. During the year 1995-96, IEEE and IEE have organised TROIKA 96, which was inaugurated by Shri N. Vittal, former Secretary of Department of Electronics and presently, Chairman, Public Enterprise Selection Board. The programme was participated by more than 100 colleges including the IITs. TECHNOVISION and TECHNOPIA were the highlights of TROIKA 96. ASME, SAE and ASHRAE chapters of DCE organised a National Programme of MACH-96 to review the state-of-art developments in computer-aided design & computer-integrated manufacturing . The programme was inaugurated by Shri K.L. Chugh, Chairman Emeritus, ITC Ltd.and was participated by the students of about 150 colleges.

A watershed development will soon be marked when the College will be shifting to its new site - a sprawling and commodious campus at Bawana Road, Rohini. It is proposed to start first semester B.E. classes at the new campus in the forthcoming academic session.

The college student community besides exhibiting high academic performance possesses an exemplary record in sports and in the inter-college tournaments. The college Sports council coordinates the sports activities. The Cultural Society of the college organises various cultural activities. Our students have won laurels in the Debates and Dance competitions. The college cultural festival code named **Engifest** is an annual rendezvous for the students community of various Colleges and the Universities. During **Engifest,** the college Hindi Society VIKALP organised Rashtriya Kavi Sammelan which has been listed among the top ten Kavi Sammelans of our country.

The College thus continues to play its vital role in the Development of our nation. The role of engineers in restructing India's economy is going to be much more significant than hitherto. The engineers of tommorow are to meet the challanges of global competitiveness and have to respond to the demands of quality assurance at world standards. The knowledge and skills of engineering graduates have therefore to be enriched by their commitment to a quality and productivity linked culture besides a care and concern for the society and the enviroment.

The college community is fully committed to meet the aspirations of people of this country.

1. COURSES OF STUDY

The College admits students to the following courses of the University of Delhi.

1.1 DEPARTMENTS OF ELECTRICAL ENGINEERING, ELECTRONICS & COMMUNICATION AND COMPUTER ENGINEERING

The ever increasing demand for electric energy, faster and novel means of audio and video communication systems and the automation in industry etc., have made the electrical engineer an indispensable member of the modern society. Under the worsening energy crisis, the role of an electrical engineer comprises the design and development of more efficient electrical machinery, power systems and control equipment and systems. With ever-increasing tempo of events throughout the world, it has become essential to have more efficient communication network with the latest electronic devices and circuits.

Besides giving a thorough grounding in basic sciences and engineering subjects, the curriculum in Electrical Engineering lays emphasis on deep understanding of electrical and electronic networks and devices, electromagnetic field theory, computer fundamentals, electrical energy converters and electrical energy distribution systems, including their protection and communication and control systems, etc.

With a team of well-qualified teachers, the Department runs both U.G. and P.G. Programmes. The U.G. programme offers degrees in: (i) Electrical Engineering (Power) with electives in the areas of Power Systems, High Voltage Engineering, Electrical Machines and Drives, Illumination Engineering, Control Engineering, Nuclear Engineering etc., (ii) Electronics and Communication Engineering with electives in Computers, Communication Systems, Microelectronics, Radar and Television Engineering, etc. and (iii) Computer Engineering.

The department has well-equipped laboratories such as Electrical Machines Laboratory, Power systems Laboratory, Instrumentation and Control Systems Laboratory, Telecommunication and Microwave Laboratory and Computation/Micro electronics Laboratory. In addition, microprocessor kits and microprocessor based computing machines are available for project work. The College has a full fledged Computer Centre.

1.1.1 Under Graduate Courses

(i) B.E. (Electrical) of 4 years duration.

(ii) B.E. (Electronics & Communication) of 4 years duration.

(iii) B.E. (Computer Engineering) of 4 years duration.

(iv) B.E. Tech (Electrical) Part-time evening course of 5 years duration.

(v) B.E. Tech (Electronics & Communication) Part-time evening course of 5 years duration.

1.1.2 Post Graduate Courses

Three Semesters' Full time/Five Semesters Part-time (Day) M.E. in Electrical Engineering in.

(i) Control and Instrumentation.

(ii) Electronics and Communication.

(iii) Power Apparatus and Systems.

1.1.3 Full Time Ph.D. Programmes

A few full time scholarships are available in the following fields.

Electrical Machines and Drives, Power Systems, Control Systems, Power Electronics, Microwave Communication, Analog and Integrated Circuits and Digital Electronics.

1.2 DEPARTMENT OF MECHANICAL ENGINEERING

Mechanical Engineering is the science of exploring the natural resources of power and propulsion and materials of engineering construction, through the design, development, production, installation and operation of power plants, transport equipments and industrial plants besides the organisation and administration of such plants.

In addition to the basic and engineering sciences like Mathematics, Physics, Chemistry, Graphics, Electrotechniques, Thermodynamics, Mechanics of Solids, the programme in Mechanical Engineering lays emphasis on the analysis and synthesis involved in the design, manufacture and operation of prime movers, pumps, compressors, machine tools, mass production techniques, etc. Some amount of specialisation is possible in the Final Year of the B.E.(Mechanical)

course in (1) Thermal Engineering, (2) Design and (3) Production Engineering.

The department has well equipped laboratories such as Instrumentation and Experimental Stress Analysis Laboratory, Strength of Materials Laboratory, Dynamics of Machines Laboratory, Fluid Mechanics Laboratory, Internal Combustion Engines Laboratory, Refrigeration and Air-conditioning laboratory, Automotive Engineering Laboratory and Heat Transfer Laboratory, etc.

1.2.1 Under Graduate Courses

(i) B.E. (Mechanical) of 4 years duration.

(ii) B.E. Tech (Mechanical) Part-time evening course of 5 years duration.

1.2.2 Post Graduate Courses

Three Semesters' Full time/Five Semesters Part-time (Day) M.E.Mech. Engg. Course in Thermal Engineering

1.2.3 Full Time Ph.D. Programmes

A few full time scholarships are available for research and development in Mechanical Engineering in the areas of Thermal Engineering , Power Plants, I.C. Engines, Refrigeration and Air-Conditioning, Turbomachinary, Gas Dynamics, Machine Design, Vibrations, Machine Dynamics, Kinematics, Fracture Mechanics, Rotodynamics, Composite-Materials, Stress Analysis, Fluid Mechanics, Instrumentation and Finite Element Analysis.

1.3 DEPARTMENT OF PRODUCTION AND INDUSTRIAL ENGINEERING

In today's dynamic society with depleting material/energy resource endowment, the Production and Industrial Engineering holds the key to faster growth through higher productivity by adopting integrated design and efficient planning and operation of the whole manufacturing system with control over all its phases of activities.

Production and Industrial Engineering is concerned with the design, improvement and installation of integrated systems of men, materials, equipment and process. It occupies the central position in any industrial enterprise and consists of human activity systems

concerning the physical work place at which human activity occurs and the management control systems concerning planning, measuring and controlling all activities with the organisation besides designing the production process for a product.

The programme of study at under graduate level is designed to produce young engineers with analytical and synthesising abilities, scientific attitude and social sensitivity in the world of rapid technological obsolescence. In addition to the basic and engineering sciences, it sets out to provide a strong base in computer applications in the integration of various activities like component production, process planning, production planning etc. and then proceeds to build up controls and systems engineering, industrial automation, process engineering and management subjects in order to produce top class engineers in the new and emerging area of high technology to play a vital role in the national growth. At post graduate level the subjects are dealt with in depth.

The area is multi-disciplinary in nature and adopts a systems approach. It is backed by well equipped laboratories in Science of Engineering Manufacture, Metrology, Industrial Engineering, Automation and FMS. Besides, the College has well equipped workshops and computer centre to cater to the needs of the course.

1.3.1 Under Graduate Course

B.E. (Production & Industrial Engineering) of 4 years duration.

1.3.2 Post Graduate Course

Three Semesters Full time M.E. in Production Engineering.

1.3.3 Full Time Ph.D. Programmes

A few full time scholarships are available for Ph.D. in the areas of Metal Forming, Foundry Technology and Computer Aided Manufacturing Systems.

1.4 DEPARTMENT OF CIVIL ENGINEERING

Civil Engineering aims at improving to civic life of man by harmonising the natural resources available on earth. It concerns with planning, research, design and construction of buildings and roads, traffic and transportation, irrigation and power, water supply and

sewage disposal, dams and reservoirs, ports and harbours, airways and navigation, treatment for industrial wastes and abatement of air pollution, etc.

Besides the basic and engineering sciences, the curriculum in Civil Engineering covers various professional subjects e.g. structures, foundation, construction, works management and cost, transportation engineering, irrigation engineering, hydraulics and environmental engineering etc.

The Department runs both under-graduate and post-graduate programmes. The under-graduate curriculum is broad-based and designed to introduce the students to a wide range of problems encountered by civil engineers. Electives and independently conducted projects are offered in the final year to enable the student to develop additional depth in areas of special interest to them. Survey camp and practical training which are part of the curriculum, aim at exposing the students to actual field problems. Laboratory experiments, computer aided analysis, design & drawing and the tutorial classes are held to build confidence in the students.

The Post-graduate curriculum prepares the students for research and design-oriented programmes with emphasis on practical problems. The part-time course is intended for persons employed in the industrial sector so as to improve their sphere of activities in their own organisations. These students have also to undertake a research programme, the problems for which are taken from day to day requirements of the industry and design organisations, besides taking part in the seminars organised by the Department.

The Department is well-equipped with laboratories related to Structures, Concrete testing, Soil Mechanics, Highway Engineering, Experimental Stress Analysis, Environmental Engineering and Hydraulics.

The Department also undertakes to organise special lectures and discussions by eminent persons from the field and industry.

1.4.1 Under Graduate Courses

(i) B.E. (Civil) of 4 years duration.

(ii) B.E. Tech. (Civil) Part-time course of 5 years duration (Evening)

1.4.2 Post Grauate Course

Three Semesters' Full-time M.E. Civil Engineering courses in:

(i) Structural Engineering.
(ii) Hydraulics and Flood Control.
(iii) Environmental Engineering.

Note: Five Semester Part-Time (Day) course is also offered in Environmental Engineering.

1.4.3 Full Time Ph.D. Programmes

A few full time Ph.D. scholarships are available in the following fields.

Structural Engg., Water Resources Engg., Environmental Engg., Stress Analysis, Engineering Geology.

1.5. DEPARTMENT OF APPLIED PHYSICS

1.5.1. Post Graduate Course

Six Semester Part-time (Day) M.Sc. (Applied Physics) course.

M.Sc. Course in Applied physics is designed to meet the requirements of Scientists working in Laboratories and Industrial organisations. Major emphasis is laid on Material science, Applied Optics, Instrumentation including industrial Ultrasonics and Vacuum Techniques. The department has laboratory facilities in these areas.

1.5.2. Full Time Ph.D. Programme

A few full time Ph.D. Scholarships are available in the fields of Nuclear Physics, Ultrasonics, Material Science, Electronic Science.

1.6 DEPARTMENT OF APPLIED CHEMISTRY

The Department possesses an excellent infrastructure and laboratory facilities for implementing several High-Tech. Research and Development Projects in the area of Polymer Technology and Industrial Chemistry.

1.6.1 Post Graduate Course

Three Semester Full-time and Five Semester Part-time (Day) Master of Engineering course in Polymer Technology.

This course in Polymer technology has been specifically designed for Engineers, Technologists and Scientists with research and development aptitude in the industries. Its aim is to provide the students with a profound education, as well as methodological preparation for their own research, educational or industrial activities. Special emphasis is however, laid on advanced processing concept, design, development, computer aided plant design, fabrication technology, polymer processing and polymerisation engineering, property estimation and modelling and research with prototype micro-processor based control. Over the years a good number of students have successfully completed their M.E. (Polymer Tech) Part-time & full-time course and have got immensely benefited. All of them have very good positions in industries & academic institutions in India and abroad. In conducting this course a close co-ordination has been established between the college and industries. A continuing Education centre has been established under MHRD scheme for developing course material for working professionals. The Department has the following five most sophisticated laboratories well equipped with latest micro-processor based instruments.

1. Polymer Research Laboratory
2. Polymer Processing Laboratory
3. Polymer Specification & Quality Control Laboratory
4. Material Science Laboratory,
5. General Chemistry Laboratory

1.6.2 Full Time Ph.D. Programmes

The department has a specialized team working on the advanced research problems of the engineering polymeric materials. Teachers of this department are actively engaged in conducting and supervising research in the following major areas of current interest:

Polymer Science & Technology, Material Science and Polymer Composites, Adhesives, Thermally stable polymers, Biodegradable polymers, Ion-exchange, Electrochemistry, Chemical Thermo-dynamics

A few full-time Ph.D. scholarships are available in the above fields.

1.7 DEPARTMENT OF APPLIED MATHEMATICS

Mathematics is one of the core subjects in all engineering disciplines. The Department takes care of this need of the students and offers several courses at UG and PG level.

A computer centre equipped with state-of-the-art equipment exists in the Department. The facilities include a Digital - 3000/800 system, an HP-9000/560 system, two Pentium servers, an i860-based super-fast mini computer, a multimedia machine, two EISA-based-486 machines, about a dozen 486/386-based PC-ATs, and a host of peripherals like streamer and cartridge tape-drives, graphic terminals, line-printer, laser and ink-jet printers, DMPs, plotters, scanner, digitizer etc. These facilities are being continuously enhanced.

1.7.1 Post Graduate Courses

Three Semester Full-time and Five Semester Part-time (Day) Master of Engineering course in Computer Technology and Applications.

This is an interdisciplinary programme, and the other participating departments are Deptt. of Computer Engineering and Deptt. of Electronics and Communication Engineering.

1.7.2 Laboratory/Computational Facilities

A Computer centre equipped with state-of-the-art equipment exists in the Department. The facilities include a Digital-3000/800 system,an HP-9000/560 system an i860-based super-fast mini computer,a multimedia machine, two EISA-based 486 machines, about a dozen 486/386-based PC-ATs, and a host of peripherals like streamer and cartridge tape-drives, graphic terminals, line-printer, laser and ink-jet printers, DMPs, plotters, scanner, digitizer etc. These facilities are being continuously enhanced—two HP Pentium-based machines with fault-tolerance and RAID features are being added shortly.

1.7.3 Full Time Ph.D Programme

A few full-time scholarships are available in the areas of Fluid Dynamics, Operational Calculus, Bio-Mechanics, Graph Theory and Elasticity.

2. ADMISSION to B.E. Full-Time Courses

2.1 B.E. COURSES OFFERED

The following courses are offered under the Faculty of Technology leading to Bachelor of Engineering degree :

Delhi College of Engineering	**Intake**
Electronics & Communication Engg.	40
Computer Engg	20
Electrical Engg.	70
Mechanical Engg.	100
Civil Engg.	70
Production & Industrial Engg.	20
Total	**320**

Delhi Institute of Technology	
Electronics & Communication Engg.	45
Computer Engg.	45
Instrumentation & Control Engg.	45
Manufacturing Proccess and Automation Engg.	20
Total	**155**

2.2 ELIGIBILITY CONDITIONS FOR ADMISSION

2.2.1 Educational Qualifications

A candidate passing any one of the following examinations (termed hereafter as the Qualifying Examination) and securing 60% or more marks in the aggregate of Physics, Chemistry and Mathematics shall be eligible for admission to the First Semester of Bachelor of Engineering course provided he/she has passed in each subject separately:

(i) Senior School Certificate Examination (12 Years Course) of the Central Board of Secondary Education (C.B.S.E.) New Delhi.

(ii) Indian School Certificate Examination (12-year Course) of the Council for Indian School Certificate Examination, New Delhi.

(iii) B.Sc. (Gen.) Group A' Final Examination of tne University of Delhi or an equivalent examination.

(iv) B.Sc. (Hons.) Examination in Physics, Chemistry and Mathematics of the University of Delhi with the combination Physics, Chemistry, Mathematics and with equal weightage to the subsidiary subjects, or an equivalent examination.

(v) Any other examination recognised as equivalent to the Senior School Certificate Examination of the C.B.S.E. by the University of Delhi.

A candidate must additionally have passed English as a subject of study either at the 10th Class level or 12th Class level (core or elective).

Note:

(i) An applicant who has to leave an Engineering Degree Course, or an equivalent course, after exhausting the permissible number of chances in any other University/Board in India, will not be eligible for admission to Bachelor of Engineering course.

(ii) Candidates who have appeared at the Annual Examination in the year 1996 and placed in compartment will not be eligible for admission for the year 1996.

(iii) Candidates who have appeared at the Annual Examination of the year 1996 and are to reappear for the improvement to acquire the eligibility will not be considered for admission for the year 1996.

(iv) No admission will be made directly to the second or any subsequent semester of the course.

(v) No admission will be made after 31.8.1996. The University of Delhi may, however, condone the delay in exceptional cases.

2.2.2 Relaxation in Marks for Reserved Category

Candidates belonging to the following categories, who apply for seats reserved for them shall be allowed a concession in the minimum eligibility requirements as detailed below:

(i) ***Scheduled Castes/Scheduled Tribes***

Candidates belonging to Scheduled Castes/Scheduled Tribes shall be allowed 10% concession of marks in the minimum eligibility requirements.

(ii) ***Defence Quota***

The children and/or widows of Personnel of Armed/Para-Military forces killed/disabled in action during hostilities who apply for seats

reserved for them shall be allowed relaxation of 5% marks in the minimum eligibility requirements.

2.2.3 Age Requirements

Applicant must be 17 years of age on or before the 1st October of the year in which he/she seeks admission.

Relaxation in age upto one year only, with the approval of the Vice-Chancellor, is permissible. Candidates who are short in age by more than one year are not eligible for admission.

2.3 REGION-WISE ALLOCATION OF SEATS

The total seats earmarked for the B.E. Courses shall be allocated region-wise as follows:

(i) Delhi Region

For students passing from schools in the Union Territory of Delhi : **85%**

(ii)Outside Delhi Region

For students passing from Schools/Colleges/Institutions located outside the Union Territory of Delhi : **15%**

NOTE:

(i) The criterion for deciding the eligibility of an applicant to a seat reserved for any region is the **location of the School/College** from which the candidate has passed the Qualifying Examination on the basis of which he/she is seeking admission.

(ii) Admission under the above two regions is open to Indian nationals only.

2.4 (i) Category-wise Allocation of Seats

Region/Catergory	Category code	Total Seats DCE	DIT
DELHI			
General	**DG**	197	95
Scheduled Caste	**DC**	41	20
Scheduled Tribe	**DT**	20	10
Defence	**DD**	14	7
		272	**132**
OUTSIDE DELHI			
General	**OG**	37	18
Scheduled Caste	**OC**	7	3
Scheduled Tribe	**OT**	4	2
		48	**23**
TOTAL		**320**	**155**

(ii) Seat-Distribution - 1996

Branch	E&C	CoE	EE	ME	P&I	CE	DCE	E&C	CoE	IC	MPA	DIT	Grand
Code	1	2	3	4	5	6	Total	7	8	9	10	Total	Total
Category													
DG	25	12	43	62	12	43	197	28	27	28	12	95	292
DC	5	3	9	13	2	9	41	5	6	6	3	20	61
DT	2	1	5	6	2	4	20	3	3	3	1	10	30
DD	2	1	3	4	1	3	14	2	2	2	1	7	21
OG	5	2	8	12	2	8	37	5	5	5	3	18	55
OC	1	1	1	2	0	2	7	1	1	1	0	3	10
OT	0	0	1	1	1	1	4	1	1	0	0	2	6
Total	40	20	70	100	20	70	320	45	45	45	20	155	475

E&C : Electronics & Commn. Engg. CoE : Computer Engg. EE : Electrical Engg. , P & I : Prod. & Indl. Engg. IC : Instrumentation & Control Engg., MPA : Manu. Processes & Automation Engg.

2.5 Reservations

The aforesaid allocation of seats carries the following reservations.

(a) *Scheduled Castes Scheduled Tribes*

15% for Scheduled Castes and 7.5% for Scheduled Tribes of the total seats in each institution

(b) *Defence Quota*

5% of total seats under Delhi Region, in each course, for children/widows of Personnel of Armed/Para Military Forces of Delhi killed/disabled in action during the hostilities.

However, if any seat remains vacant after the admission of candidates of the above category, the children/widows of officers and men of Armed Forces of Delhi including Para-Military Personnel, who died while on duty, will be considered for admission against these reserved seats.

In case sufficient number of eligible candidates from the Categories mentioned at (a) and (b) above are not available, the vacancies will be treated as unreserved in the respective regions.

2.6 NOMINEES OF THE GOVERNMENT OF INDIA

(a) One seat over and above the normal total intake in both the Institutions taken together for Wards/Children of India based staff posted at Indian Missions abroad provided they have passed their qualifying examination from outside India Nominations against this seat will be made by the Ministry of External Affairs, Govt. of India, New Delhi. Any person who is sponsored by the Govt. of India on an assignment abroad will be treated to be the staff posted in Indian Missions abroad

Note: In case of countries where educational facilities are totally inaequate/and are not available upto the qualifying standard and the ward/children of India based personnel who had to study in India due to a situation of turmoil, such students can also be eligible, provided that a certificate to this effect is issued by the Indian Ambassador in the Country concerned and is attached with the application.

If the nomination of the Ministry of External Affairs is for more than one candidate, preference will be given to the candidates covered under Clause (a).

(b) Six seats in Delhi College of Engineering (Electrical-1, Electronics & Communication-1, Mechanical-1, Civil-1, Production & Industrial-1, Computer-1) and two seats in Delhi Institute of Technology (Electronics & Communication-1 and Computer-1) over and above the normal intake for candidates from friendly and developing countries. Nominations against these seats will be made by the Ministry of External Affairs, Government of India.

2.7 PROCEDURE FOR OBTAINING THE APPLICATION FORM FOR ADMISSION

The admission to B.E. courses in both the institutions, namely, Delhi College of Engineering (DCE) and Delhi Institute of Technology (DIT), will be made centrally by Delhi College of Engineering.

The admission of the candidates belonging to the different categories will be made as under:

(i)	**Delhi Region excepting *Defence Quota* and Outside Delhi Region for all categories.**	On the basis of the Combined Entrance Examination, CEE-96 held on May 19, 1996.
(ii)	**Defence Quota of Delhi Region (i.e. for the category DD)**	On the basis of Qualifying Examination (see 2.2.1)

The candidates who have appeared in the CEE-96 are NOT automatically considered for admission to B.E. courses. They are required to submit a separate application in a prescribed form to be procured from Delhi College of Engineering. The procedure for obtaining the application forms is described in Section 2.10 Sale of these forms is expected to begin on 12.6.1996.

The candidates who seek admission as nominees of the Government of India need not submit the aforesaid application. Their applications must be forwarded through the concerned ministries of Govt. of India.

For all categories other than DD (Defence Quota under Delhi Region), the basis of admission is the rank secured by the candidate in CEE-96. In case more than one candidate has secured the same rank, the **PCM percentage**, calculated from the marks secured by the

candidate in the Qualifying Examination (see Section 2.2.1), will be the deciding factor. If the PCM percentages are also identical, the candidate **born earlier** will be given preference.

For the candidates belonging to the DD category, the PCM percentage in the qualifying Examination will form the basis of admission. If more than one candidate has the same PCM percentage, the aggregate percentage becomes the deciding factor. In case the aggregate are also identical the candidate born earlier will be given preference.

Branch allotted to a candidate is determined by the criterion as explained in the two preceding paragraphs vis-a-vis preference of branch given by him/her. Depending on the position of the candidate in the merit list, the highest available choice of the branch as indicated by the candidate is allotted.

The procedure for admission to B.E. Courses in Delhi College of Engineering and Delhi Institute of Technology for the 1996 batch will be as follows. **Candidates are required to come for admission as per schedule given later in Section 2.9 provided that they have submitted the application and have the rank as specified in the schedule. The list of applicants will be displayed on the notice boards.** ***NO LETTERS calling the Candidates for admission will be issued. The Candidates are required to present themselves as per the schedule in Section 2.9. according to the Rank in CEE-96. Only those candidates who have submitted the application for admission in the prescribed form in time and have the rank as specified will be considered for admission.***

The candidates are required to bring the following original certificates: **Class X certificate (indicating the date of birth), provisional certificate, mark sheet of the Qualifying Examination along with one set of attested Xerox copies.** The candidates will be called one by one according to the Rank in CEE 96 from amongst those present at the time and date as specified in Section 2.9. They will be informed of the branch offered to them as per their preference indicated by them in application form and their Rank in CEE-96 and asked to present the documents. After verification, the originals and Xerox copies will be retained and an admission–slip issued. *The candidate must pay the fees immediately.*

If the candidate does not report for admission on the scheduled date at the specified time either in person or through his/her nominee, or if a seat is offered in the branch which may or may not be his/her first preference and he/she refuses to accept the same or he/she does not pay the fees on the day of admission, his/her name will be deleted and he/she will cease to be a candidate and hereforth will not have any subsequent claim to a seat in B.E. Course during 1996-97.

In case the number of candidates present are more than the seats available a few may be offered admission against the possible future vacancies on submission of originals and payment of fees. The remaining present will be placed on the wait-list and if the vacancies persist after 27.7.96 the candidates next in the merit list will be informed individually by Registered Post.

The original certificates will be returned after Dec 1996 or on withdrawal from the college which ever is earlier.

2.8 Upgradation to a Branch of Higher Preference

A candidate who has been admitted to a branch other than of his/her first choice, will automatically be transferred, as per his/her merit in CEE-96, to a branch of his/her higher preference as indicated in his/her application. The list of students with upgraded branches will be displayed periodically. Notifications in this respect will be issued by the Chairman, B.E. Admissions Committee. In case a candidate desires to continue in the branch allotted to him/her at the time of admission or a subsequent upgradation, other than his/her higher preference as indicated in his/her application then he/she must submit, a request in writing to the Chairman, B.E. Admissions Committee within 3 days of the admission/upgradation. However, in case of Delhi General (DG) Category, above confirmation, if any, shall have to be given on the day of initial admission itself and not within three days. Any such request made later may not be entertained. The students should further note that a change in branch may involve a change in institution as well. Once an upgradation list is issued, it is mandatory for the students to shift to the new branch. Requests for reversion to the old branch may not be entertained.

2.9 Time Schedule

Applications:

1.7.96 Last date for receipt of request for application form by post.

15.7.96 **Last date for receipt of completed applications.**

Admission:

The candidates, called on the basis of the rank obtained in the CEE-96, should present themselves for the admission on the date and time as specified below. A list of the candidates will be displayed on the day of admission. Only those candidates whose names are listed will be considered for admission. No separate lists of selected candidates giving the branches etc. will be put up.

Reporting Time : 10.30 a.m., unless specified otherwise

Place : Assembly Hall, DCE

19.7.96 All candidates belonging to **DD**, all candidates belonging to **DT**, and the candidates of **OT** having a rank from **1 to 15** in CEE-96 are to report for admission.

20.7.96 The candidates of **DC** having a rank from **1 to 120**, and **OC** having a rank from **1 to 25** in CEE-96 are to report for admission.

22.7.96 The candidates of **OG** having a rank from **1 to 300** in CEE-96 are to report for admission.

23.7.96 The candidates of **DG** having a rank from **1 to 250** in CEE-96 are to report for admission.

24.7.96 The candidates of **DG** having a rank from **251 to 450** in CEE-96 are to report for admission.

25.7.96 The candidates of **DG** having a rank from **451 to 650** in CEE-96 are to report for admission.

27.7.96 3:00 p.m. List of admitted students will be displayed categorywise indicating the branch allotted. In case of DCE students, Registration and Roll No will also be indicated.

30.7.96 Students report in the Auditotium followed by registration and orientation.

1.8.96 10:30 a.m. Principal's address to the new students.

Teaching of First Semester starts.

If the vacancies still persist, candidates next in the merit list will be informed individually by Registered Post.

The attendance of all students admitted is continuously monitored. The names of those students who have not registered on 30.7.96 or whose attendance is irregular during the period 1.8.96 to 21.8.96 will be struck off from the rolls without any further reference.

A student who has been duly admitted but has not registered or failed to attend the classes, may submit an application through his/her parent/guardian explaining the reasons. Principal/Director may defer the cancellation of his/her seat if he is satisfied with the explaination.

No admission will be made after 31.8.1996. The University of Delhi may, however, condone the delay in exceptional cases.

2.10 Procedure for Obtaining the Application Form for Admission

All candidates seeking admission to B.E. courses in DCE/DIT are required to submit an application in a prescribed form available from Delhi College of Engineering, Delhi either in person on payment of Rs. 50/- in cash at the College counter, or by post on remitting Rs. 60/- by a crossed Indian postal order, drawn in favour of the Principal, Delhi College of Engineering, Delhi and payable at G.P.O., Delhi. No other mode of payment is acceptable. The written request must indicate the following:

1. Applicant's name and address to which the form is to be sent.
2. Course for which the application form is sought.
3. Three slips of paper of the size 10cm x 5cm containing the address to which the form is to be sent.

The candidate requesting for the application form must write on the top of the envelope "Request for B.E. Form" and mail it to D.A.O. (Academic) Delhi College of Engg., Kashmere Gate, Delhi-110006. Such a request for the form must reach the College on or before 1.7.96. Requests received after that date will not be entertained.

The sale of Application Forms is expected to begin on 12.6.96. The candidates who seek admission as the nominees of Government of India need not submit the aforesaid application.

2.11 Instructions for Filling the application form

General: Read the instructions carefully before filling the form. Use capital letters only. Complete all the items. Incomplete applications are liable to be rejected. Avoid over-writing. The instructions are given item-wise as per the order in the Application Form.

#1. Write the name as given in the school records. The postal address should be complete and the pin code number given.

#2. (a) As already stated the criterion for deciding the eligibility of an applicant to a seat reserved for a region is the location of school/college from which he studied and passed the Qualifying Examination. Based on the location of the school and reservation if any, identify the two letter code such as DG,DC, DT, DD, OG, OC & OT given in the table in section 2.4.

(b) Write the rank, in the respective category, obtained in CEE-96 (except for DD quota)

#3. (a) Tick (✓) the appropriate box.

(b) Indicate the religion.

(c) Indicate the nationality. Please note that the admission to the seats indicated is open to Indian Nationals only.

#4. Write the name of the Qualifying Examination on the basis of which you are seeking admission. If you have passed more than one examination listed at para 2, you may select any one. However, the two letter code must be consistent with the examination.

#5. Write the name of the Board/University which conducted the examination listed above.

#6. Write the name of the State/Union Territory where the school is located.

#7. Please note that you are not required to submit any mark-sheet etc. at this stage.

(a) Indicate the total marks obtained at CEE-96 out of 720.

(b) Calculate the percentage marks obtained in Physics, Chemistry & Mathematics as indicated by the Board/University rounded to two decimal places. PCM percentage is calculated by adding the Physics, Chemistry & Mathematics percentage as above and dividing by 3.

(c) Aggregate percentage means the total which is considered by the Board/University for the classification of the result.

#8. (a) Tick [✓] the appropriate box.

(b) The certificate is to be signed by the candidate after writing the caste'.

#9. Write the roll number of CEE-96 (except for DD quota).

#10. (a) Write the date of birth as in your school record.

(b) If you are under-age, indicate the extent of shortage in months and days in the boxes provided. Shortage is to be calculated by subtracting the age as on 1.10.96.

11 Indicate the preference of the branch by writing the branch code number as given below under the choice numbers.

Branch	*College*	*Branch Code*
B.E. Electronics & Communication	DCE	1
B.E. Computer Engg.	DCE	2
B.E. Electrical	DCE	3
B.E. Mechanical	DCE	4
B.E. Production & Industrial	DCE	5
B.E. Civil	DCE	6
B.E. Electronics & Communication	DIT	7
B.E. Computer Engg.	DIT	8
B.E. Instrumentation & Control	DIT	9
B.E. Manufacturing Process & Automation	DIT	10

The option once exercised will be treated as final.

No change in the order of preference will be permitted subsequently.

Note: Since the admission to B.E. Courses at DCE and DIT are being done centrally, the transfer of branches on the basis of preference may involve a change of the Institution also.

#12. According to the requirements for admission a candidate must have passed English as a subject at X class or XII class level. Indicate the higher examination in English passed.

#13, 14, 15 Enter the desired information. Pin-code of the institution is essentially required.

#16. This certificate is to be signed by the Principal of the School where you studied last. Name and address of the school is to be shown at the appropriate place.

#17, 18, 19, 20, 21 Enter the desired information.

Note: Any address need not be repeated. Write "Same as.....".

The Principal (DCE)/Director (DIT) may send communi-cations to the parents/guardians in case of shortage of attendance for poor progress in studies. For this purpose the office address at Item 13 will be used. In case father is not alive, the office address at item 17 will be used. In emergencies the local guardian will be contacted.

#22. Candidates applying for any reserved seat as mentioned in para 2.5 (a) & (b) (i.e., SC/ST & Defence Quota) should submit the following certificates as the case may be:

(a) For admission to a seat reserved for Scheduled Castes/ Scheduled Tribes, a certificate in original from an approved District authority stating the Scheduled Caste/Tribe, to which the candidate belongs. A list of approved authorities is given below:

(i) District Magistrate/Additional District Magistrate/ Deputy Commissioner/ Collector/ Additional Deputy Commissioner/ City Magistrate (not below the rank of Ist Class Stipendiary Magistrate, Sub-Divisional Magistrate/ Taluka

Magistrate/ Executive Magistrate/ Extra Assistant Commissioner.

(ii) Chief presidency Magistrate/ Additional Chief Presidency Magistrate/ Presidency Magistrate.

(iii) Revenue Officer not below the rank of Tehsildar.

(iv) Sub-divisional Officer of the area where the candidate and/ or his/her family normally resides.

(v) Administrator/ Secretary to Administrator/ Development Officer (Lakshadweep & Minicoy Islands).

(b) For admission to a seat reserved for Ward/Children/ Widows of Personnel of Armed/Para-Military forces of Delhi killed/disabled in action during hostilities, entitlement card in original issued by the Record Officer of the Unit/Regiment of Armed Personnel of the Armed Forces in case of Armed Personnel or from the Home Ministry in case of Para-Military Forces.

The Widows/Children of the officers and Men of the Armed Forces including Para-Military personnel who died on duty must submit a certificate to that effect, from any one of the following authorities:

(i) Secretary, Kendriya Sainik Board, Delhi.
(ii) Secretary, Rajya/Zila Sainik Board
(iii) Officer-in-Charge, Record Office.
(iv) Ist Class Stipendiary Magistrate.

#23,24 The undertakings are to be signed by the candidate/parent/ guardian as the case may be.

Write your address on acknowledgement card.

2.12. The completed Application Form for B.E. admission is to be submitted to The DAO (Academic), Delhi College of Engineering, Kashmere Gate, Delhi-110 006.

The Last Date for receipt of the completed application is 15.7.96.

The College is not responsible for any postal delay or loss. The candidates must ensure that the College receives the applications

on or before the last date. All applications received after the last date stand rejected automatically.

3. B.E. TECH. PART-TIME COURSES

The college admits the students for the following B.E.Tech courses of 5 years duration

	Intake
B.E. Tech. (Electrical Engg.)	30
B.E. Tech (Electronics & Communication)	30
B.E. Tech.(Mechanical Engg.)	30
B.E.Tech. (Civil Engg.)	30

Classes will be held 5 days a week in the evening from 6.00 pm to 9.00 pm. Some classes may be scheduled for holidays and Sundays during the daytime.

3.1 ELIGIBILITY CONDITIONS

A candidate seeking admission to a course of study for the degree of B.E. Tech. (Electrical/Electronics & Communication/ Mechanical/ Civil Engineering) must have passed

(a) A State Diploma Examination of 3 Years duration in corresponding branch or any other examination recognised as equivalent thereto by the University of Delhi with a minimum aggregate of 55% (45% for Scheduled Caste/Scheduled Tribe candidates).

(b) "After passing the said examination, a candidate must be in full time employment, training or apprenticeship in installation, operation and maintenance or some other field work in an approved engineering works/organization, located in the National Capital Region, Delhi, in the relevant branch of engineering for a period of not less than one year on the 1st day of October of the year of Entrace Examination and should continue to be in employment for the entire duration of the course."

Note : **"Passing the said examination" will be construed to imply the date of last examination (Annual or otherwise) taken by the candidate leading to Complete Fulfillment of the requirements for the award of three years' State Board Diploma.**

(c) Must have attained 19 years of age before the First October of the year of admission.

(d) The candidate must appear in the B.E. Tech. Entrance Examination and selection will be made on the basis of the merit in the Entrance Examination.

Note : No admission will be made directly to the second or subsequent year of the course.

3.2 RESERVATIONS

The seats carry the following reservations:

(i) For Scheduled Castes candidates 15% and for Scheduled Tribes candidates 7.5% in each course.

(ii) One seat in each course for eligible candidates from amongst the staff of Delhi College of Engineering /Delhi Institute of Technology/ Industrial training Institutes and Polytechnics run by Government of Delhi.

3.3 SELECTION PROCEDURE

Selection will be made strictly on the basis of merit in a written test which will consist of Two Parts in one paper of 3 hours duration. The first part will be common to all and the second part will be specific for each course.

The entrance examination is to be held on 21.07.96. The last date for receipt of the application forms is 24.06.96.

4. POST GRADUATE COURSES

The College admits the students to the following Post Graduate Courses of the University of Delhi:

(i) MASTER OF ENGINEERING (M.E.) COURSES

(ii) M.Sc. (APPLIED PHYSICS) COURSE

4.1 MASTER OF ENGINEERING (M.E.) COURSES

The college offers the following courses.

Deptt./Courses	*Number of seats*	
	Full-time	*Part-time*
1. CIVIL ENGINEERING		
(i) Master of Engg. in Civil Engg. (Structural Engg.)	*20 for all three together*	Nil
(ii) Master of Engg. in Civil Engg. (Environmental Engg.)		5
(iii) Master of Engg in Civil Engg. (Hydraulics & Flood Engg.)		Nil
2. ELECTRICAL ENGG./ELECTRONICS & COMMUNICATION ENGG.		
(i) Master of Engg. in Elect. Engg. (Control & Instrumentation)	7	5
(ii) Master of Engg. in Elect. Engg. (Electronics & Communication)	8	5
(iii) Master of Engg. in Elect Engg. (Power Apparatus & System)	Nil	5
3. MECHANICAL ENGINEERING		
Master of Engg. in Mech. Engg. (Thermal Engg.)	8	5
4. PRODUCTION & INDUSTRIAL ENGINEERING		
Master of Engg. in Mech. Engg. (Production Engg.)	7	Nil
5. APPLIED CHEMISTRY		
Master of Engineering (Polymer Technology)	10	5
6. APPLIED MATHEMATICS (Jointly with Dept. of Computer Engg. and Deptt. of Elect. & Comm. Engg.)		
Master of Engineering in Computer Technology and Applications	10	5

Full time courses are of 3 Semesters duration and Part time courses are of 5 semesters duration.

Instruction for part-time courses are normally arranged from 8.30 a.m. to 10.30 a.m. on 5 days a week and on Saturdays/Sundays if necessary. Whenever possible the full-time students and part time students may also have combined classes.

4.2 EDUCATIONAL QUALIFICATIONS

4.2.1 M.E. (CE/EE/EC/ME/PE)

(i) A candidate must have passed the Bachelor's Degree Examination in the appropriate branch of engineering (Electrical/Mechanical /Electronics & Communication /Civil /Production/ Control & Instrumentation/Computer Engineering from the University of Delhi or any other Examination recognised by the University Equivalent thereto.

OR

A candidate must have passed in the A.M.I.E. (India) Exam. with appropriate specialisations/Grad I.T.E.(India), A.M.I.E. (London), A.M.I. Mech.Engg. (London), A.M.I Structure Engineering, any other examination in the concerned branch recognised as equivalent to B.E. by the University of Delhi.

(ii) A candidate of admission to full time course must have qualified in GATE (Graduate Applitude Test in Engineering).

4.2.2. M.E.(Polymer Technology)

(i) The candidate should have passed B.E. Examination in any branch of Engineering from the University of Delhi or any other Examination recognised by the University equivalent thereto:

OR

M.Sc. (Chemistry) of the University of Delhi or equivalent thereto.

(ii) All the candidates for admission to full-time M.E. courses must have qualified in the GATE (Graduate Aptitude Test in Engineering.)

4.2.3 M.E. (Computer Technology and Applications)

(i) The candidate should have passed B.E. Examination in any branch of Engineering or M.Sc. in Mathematics / Operational Research / Statistics (with Physics at the B.Sc. level) or M.Sc. in Physics / Electronics Science (with Mathematics at the B.Sc. level) from the University of Delhi or any other examination recognised by the University equivalent thereto.

OR

A candidate must have passed in the A.M.I.E. (India) Exam. with appropriate specialisations/Grad I.T.E.(India), A.M.I.E. (London), A.M.I. Mech.Engg. (London), A.M.I. Structure Engineering, any other examination in the concerned branch recognised as equivalent to B.E. by the University of Delhi.

(ii) A candidate for admission ot full-time M.E. Course must have qualified in the GATE (Graduate Aptitude Test in Engineering)

4.3 AGE REQUIREMENTS

The candidate should have attained the age of 21 years before the first day of October in the year in which he/she seeks admission. However, the Vice Chancellor may relax the age limit to a maximum period of one year.

4.4 ADDITIONAL REQUIREMENTS FOR THE PART-TIME COURSE

The following categories of candidates are eligible for admission to these courses provided they satisfy the eligibility requirements as in 4.2.1 (i) and 4.2.2 (i) above:

(i) Members working in an Engineering Institution in the National Capital Region, Delhi.

(ii) Persons in approved employment in Industry/Research/Development/Design/ Training Organisations in National Capital Region, Delhi.

Both the above categories of applicants

(a) must produce from their employers (i) a clear No objection Certificate (without qualifying conditions) and (ii) Permission

to undergo any training /project outside Delhi for about one month.

(b) will be required to continue in such employment during entire period of the course.

(c) must have had meaningful experience of 1 year before admission.

4.5 RESERVATIONS

(i) In a post graduate course where the number of seats is less than 7, no seat will be reserved for scheduled caste. Where number of seats is 7 or more than 7 and less then 15, 15% of the seats will be reserved for scheduled caste candidates (if no scheduled caste candidate is available, the seats would go to a scheduled tribe candidate, if available). Where the number of seats is 15 or more, reservation @ 15 % and 7.5 % of the seats will be made for scheduled caste and scheduled tribes candidates (inter-changeable) respectively.

(ii) For reserved category of Scheduled Castes/Scheduled Tribes the minimum eligibility for admission to Post-graduate courses will be the minimum pass marks of the University of Delhi. The Scheduled Caste/Scheduled Tribes candidates who had passed the qualifying examination from other Universities, should have secured at least the same percentage of marks at the qualifying examination (equivalent examination of Delhi University) for purpose of admission to the post graduate courses.

(iii) If the requisite number of Scheduled Castes/Scheduled Tribes candidates are not available by the last date fixed by the university for admission to each course, the remaining seats will be dereserved and filled from the general category.

(iv) A few seats not exceeding 25% of the full time total intake of each department over and above the normal intake may be provided to (a) candidates belonging to friendly and developing countries with the approval of Government of India and (b) full time candidates sponsored by Government /Public undertakings subject to condition that they fulfil the eligibility conditions of 4.2.1 (i) and 4.2.2 (i).

4.6 PROCEDURE FOR OBTAINING APPLICATION FORM

Prospectus of this college along with the application form can be obtained from the Delhi College of Engineering, Delhi either in person on payment of Rs.50/-in cash at the college counter, or by post on remitting Rs.60/-by a crossed Indian postal order, drawn in favour of the Principal, Delhi College of Engineering. Delhi and payable at G.P.O. Delhi. No other mode of payment is acceptable. The written request by post must indicate:

(i) Applicant's name and address to which the application form is to be sent.

(ii) Details of Payment
Postal Order No.
Place of Issue
Date of Issue

(iii) Course for which the application form is sought. [M.E.]

(iv) Three slips of paper of size 10cm x 5cm containing the address to which the application form is to be sent. Candidates asking for application form by post must write on the top of the envelope "Request for Application Form for M.E. Course". The request by post should reach the college on or before 1.7.96.

4.7 INSTRUCTIONS TO THE APPLICANT OF M.E. COURSES FOR FILLING APPLICATION FORM

1. Read all the instructions carefully before filling the form. Make sure that you are eligible for Admission.
2. Use Capital letters in filling the application form.
3. One recent passport size photograph is to be pasted at the proper place on the application form.
4. Copies of the following certificates are to be enclosed.
   (a) Proof of date of birth.
   (b) Proof of passing B.Sc. (Engg.)/B.E./M.Sc. Chemistry or equivalent.
   (c) Mark sheets of all subjects offered for the B.E./B.Sc. Engg. Course or Equivalent or corresponding examinations in case of other qualifications.
   (d) For admission to a seat reserved for Scheduled Caste/ Tribe, a certificate in original from an approved district

authority stating the Scheduled Caste/Tribe to which the candidate belongs. A list of approved authorities, is given at para 2.11 item 22.

(e) In case of applications to the part-time courses, a certificate from the employer is to be given on the prescribed form provided in the application.

5. Write your address on the acknowledgement card.

Last date for receipt of completed application form is 15.7.96. College is not responsible for any postal delay or loss, candidates must ensure themselves that College receives the application on or before the due date. All the applications received after the due date stand rejected automatically.

4.8 SELECTION PROCEDURE

All the applications received will be short listed on the basis of performance in GATE/ qualifying examination respectively for Full-time & Part-time Course. The short listed candidates will be called for interviews on the prescribed dates.

(a) All the applicants (both the full-time & part-time courses) must appear for an interview before the appropriate board constituted as follows:

1. Head of the concerned Department in the College (Chairman).
2. All the Professors in the respective Department.
3. The Head of other Engineering Departments or their nominees.
4. Two Assistant Professors in the concerned Department by rotation in order of seniority.

(b) Admission of a sponsored candidate for full time courses (without scholarship) will be governed by merit as per the procedure laid down for the admission to part-time courses in clause (c) below.

(c) The merit lists of the candidates for admission to M.E. Courses will be prepared by apportioning the following weightages.

Full Time	**Maximum marks**
1. Weightage for GATE score	80%
2. Interview/Viva-voce	20%
Total	**100%**

Part-Time	**Maximum marks**
1. Qualifying Examination (Aggregate)	80%
2. Interview/Viva-voce	20%
Total	**100%**

Candidates securing less than 50% marks in the above procedure will not be admitted. All admissions will be made in the order of merit.

Note:

Full-time sponsored candidates must submit a sponsorship certificate in the following format:

CERTIFICATE FOR FULL-TIME SPONSORED CANDIDATE FOR M.E. COURSES

Certified that Mr /Mrs..... employed as ..... sponsored to pursue full-time M.E. Course in ..... Department in the session ..... of .....for the year 1996.

During the entire period of the course of 18 months Mr./Mrs..... will be on full/half/without pay study leave from the organisation and will not be transferred out of Delhi or be called back during the period of study.

Date:
Place:

Signature of Competent Authority
of the organisation with seal.

(d) The programme for selection is as follows:

Interview for part-time candidates	10:00 a.m.	30.7.96
Interview for full-time candidates	02:00 p.m.	30.7.96
	10:00 a.m.	31.7-96
	02:00 p.m.	31.7.96

Note:

(i) Interview is compulsory.

(ii)If any candidate fails to appear in the interview on the scheduled date, he/she will not be considered for admission.

(iii) The list of selected candidates along with the waitlist will be put up on the notice board of the concerned department on 1.8.96.

(iv) Selected candidates will be required to submit the original certificates in the concerned department on any working day upto 2.8.96. They will be given admission slip. They should pay the fees at the fee counter and show the receipt in the department.

(v) In case some seats are still unfilled, these will be offered to the wait listed candidates. The candidates who have been wait-listed as announced on 1.8.96 should report to the department at 10.00 a.m. on 5.8.96 and the seats will be filled by the wait-listed candidates present in order of merit. These candidates shall be required to submit the original certificates and pay the fees by 12.30 p.m. same day. Any subsequent vacancies will be filled from the remaing wait-listed candidates in the order of merit.

(vi) No admission will be made directly to the second or higher semester of the course.

4.9 M.Sc. COURSES

The College offers M.Sc. Courses in Applied Physics with an intake of 10.

The course is spread over a period of three years and each year is divided into two semesters. Instruction for students is normally arranged from 8.30 a.m. to 10.30 a.m. on five days a week and on Saturday/ Sundays, if necessary. In addition, the students shall be required to attend two consecutive semesters for a period of nearly one month each summer for instructions in practicals, theory papers, drawing and workshop as may be required by the Department.

4.10 ELIGIBILITY FOR ADMISSION

(a) A candidate who has passed B.Sc. (Hons.) in Physics or Electronics or B.Sc. (Gen.) Group 'A' (Physics, Mathematics & Chemistry or Electronic Science or Computer Science) Examination of Delhi University or an Examination recognised as equivalent thereto with a minimum of 55% marks in aggregate under 10+2+3 scheme (50% for SC & ST).

OR

Minimum of 60% marks in aggregate under any other scheme (55% for SC and ST) leading to B.Sc. (Hons.) Degree in Physics or B.Sc. Degree with Physics Mathematics & Chemistry or Electronic Science or Computer Science.

(b) A candidate should be employed in approved industry/laboratory in National capital Region, Delhi for at least 12 months and should be sponsored by his/her employer.

4.11 AGE REQUIRMENTS

A candidate should be twenty one years of age before the first day of October in the year in which he/she seeks admission.

However, the Vice-Chancellor on the basis of individual merit may relax the age up to a maximum period of one year.

4.12 PROCEDURE FOR OBTAINING APPLICATION FORM

Prospectus of this College along with the application form can be obtained from Delhi College of Engineering, Delhi either in person on payment of Rs.50/- in cash at the College counter, or by post on remission Rs.60/-by a crossed Indian postal order, drawn in favour of the Principal, Delhi College of Engineering, Delhi and payable at G.P.O. Delhi. No other mode of payment is acceptable. The written request by post must indicate:

(i) Applicant's name and the address to which the application form is to be sent .

(ii)Details of payment: Postal Order No., Place of issue, Date of issue

(iii) Courses for which the application form is sought. [M.Sc. Applied Physics]

(iv) Three slips of paper size 10 cm x 5 cm containing the address to which the application form is to be sent, Candidates asking for application form by post must write on the top of the envelope **"Request for Application Form for M.Sc. (Applied Physics) Course"**. The request by post should reach the College on or before 1.7.96. Requests received after that will not be entertained.

4.13 INSTRUCTIONS TO THE APPLICANTS OF M.SC. (APPLIED PHYSICS) COURSE FOR FILLING APPLICATION FORM

1. Read all the instructions carefully before filling the form. Make sure that you are eligible for admission.
2. Use block letters in filling the application form.
3. One recent passport size photograph is to be pasted at the proper place on the application form.
4. Copies of the following certificates are to be enclosed.
   (a) Proof of date birth.
   (b) Proof of passiong B.Sc. (Gen) or B.Sc. (Hons.) Examination or equivalent.
   (c) Mark sheets of all the examinations conducted by the University.
   (d) A certificate from the employer sponsoring the candidate is to be given on the prescribed form provided in the application.
   (e) In case of candidates from Scheduled Caste/Tribes, a certificate in original from an approved district authority stating the Scheduled Caste/Tribe, to which the candidate belongs. A list of approved authorities is given at para 2.11 item 22.
5. Write your address on acknowledgement card.

Last date for receipt of completed application Form is 15.7.96. College is not responsible for any postal delay or loss. Candidates must ensure for themselves that College receives the application on or before the due date. All applications received after the due date stand rejected automatically.

4.14 SELECTION PROCEDURE

All eligible applicants for M.Sc. (Applied Physics) will be required to take written test to be conducted by the college and also appear for a Viva Voce before a board comprising:

(i) Head of Physics Department in the College.
(ii) Professors and Asstt. Professors in the Department .
(iii) Heads of the department of Applied Mathematics and Applied Chemistry in the College.
(iv) Head of the Department of Electrical Engineering or his nominee.

All the eligible candidates will be informed of the syllabus for the written test which will be conducted on 30.7.96 from 10 A.M. to 11 A.M. The candidates will be interviewed the same day at 2 P.M.

The merit list of candidates for admission to M.Sc. (Applied Physics) course will be prepared by apportioning the following weightage to their performance in the qualifying examination (on the basis of which they have sought admission) and the written test and Viva Voce mentioned above.

	Max. Marks
Qualifying Examination aggregate	50
Written test	30
Viva Voce	20
Total	**100**

Note:

(i) Written test and Viva Voce are compulsory

(ii) If any candidate fails to appear in the test, Interview /Viva Voce on the scheduled date, he/she will not be considered for admission.

(iii) The list of selected candidates will be put up on the notice board of the Physics Department on 31.7.96.

(iv) Selected Candidates will be required to submit the original Certificate and pay fees at the time of admission.

(v) No admission will be made directly to second or higher year of the course.

(vi) Candidates securing less than 45% in the merit list will not be admitted. Admission will be made strictly in the order of merit.

(vii) For purposes of merit, weightage of 5 marks will be given to candidates passing B.Sc. (Hons.) Course in Physics from Delhi University or equivalent examinations.

5. Ph.D. Programme

The college admits Full time scholars for a duration of 3 years . The areas in which the scholarships are available are given under the various departments are given below:

They are given below department wise.

(a) *Electrical Electronics & Communication Computer Engineer-ing Departments* : Electrical Machines and Drives, Power Systems, Control Systems, Power Electronics, Microwave Communication, Analon and Integrated Circuits and Digital Electronics.

(b) *Mechanical Engineering* : Thermal Engineering, Steam & Gas Turbine Power Plants, I C Engines, Refrigeration and Air-Conditioning, Turbo-machinary, Gas Dynamics, Machine Design, Vibrations, Machine Dynamics, Kinematics, Fracture Mechanics, Rotodynamics, Composite-Materials, Stress Analysis, Fluid Mechanics, Instrumentation and Finite Element Analysis.

(c) *Production & Industrial Engineering* : Metal Forming and Foundry Technology and Intustrial Management.

(d) *Civil Engineering* : Structural Engg., Water Resources Engg., Environmental Engg., Stress Analysis, Engineering Geology.

(e) *Applied Physics* : Nuclear Physics, Ultrosomics, Material Science and Electronic Science.

(f) *Applied Chemistry* : Polymer Science & Technology, Material Science and Polymer Composites, Ion-exchange, Electro Chemistry, Chemical Themodynamics.

(g) *Applied Mathematics* : Fluid Dynamics Operational Calculus, Bio-Mechanics, Elasticity, Graph Theory.

5.1. EDUCATIONAL QUALIFICATIONS

The minimum eligibility conditions for the admission to Ph.D course under the Faculty of Technology are as follows:

(i). For Engineering Disciplines:

Degree in Master of Engineering/ Master of Technology (ME/M.Tech.) in the appropriate branch from a recognised University/Institution.

(ii) For Applied Sciences:

Degree in Master of Science (M.Sc.) in the appropriate branch from a recognised University/ Institution.

5.2 PROCEDURE FOR OBTAINING APPLICATION FORM:

Prospectus of this college along with the application form can be obtained from Delhi College of Engineering, Delhi either in person on

payment of Rs.50/- in cash at the College counter, or by post on remission Rs.60/-by a crossed Indian postal order, drawn in favour of the Principal, Delhi College of Engineering Delhi and payable at G.P.O. Delhi. No other mode of payment is acceptable. the written request by post must indicate the following:

(i) Applicant's name and the address to which the application form is to be sent.

(ii) Details of payment Postal Order No. Place of issue Date of issue

(iii) Courses for which the application form is sought. [Ph.D.]

(iv). Three slips of paper size 10 cm x 5 cm containing the address to which the application form is to be sent, Candidates asking for application form by post must write on the top of the envelope "Request for Application Form for Ph.D. Course". the request by post should reach the college on or before 1.7.96. Requests received after that will not be entertained.

Last date for receipt of completed application form is 15.7.96. College is not responsible for any postal delay or loss, candidates must ensure themselves that College receives the application on or before the due date. All the applications received after the due date stand rejected automatically.

5.3 SELECTION PROCEDURE

The eligible candidates will be called for personal interview in Delhi College of Engineering for which no TA/DA will be admissible.

The selection for full time Ph.D. Scholars will be made by the College Research Council comprising of the Principal, Dean P.G. Studies, and all HODs. The selected candidates will be required to pay the fees immediately.

6. IMPORTANT DATES

The Important dates connected with the admission process are:

Activity	BE	BE Tech	ME/M.Sc./Ph.D.
Date of release of (tentative) application forms for admission	12-6-96	3-6-96	12-6-96
Last date for requests for application form by post to reach the college	1-7-96	17-6-96	1-7-96
Last date for receipt of completed forms to reach the College	**15-7-96**	**24-6-96**	**15-7-96**

Details of dates of admission are given in the relevant paragraphs

Registration	30-7-96		
Principal's address to the fresh students at 10:30 a.m.	1-8-96		
Teaching starts for first semester	1-8-96	19-8-96	5-8-96

On the day for registration, students are required to bring three passport size photographs for the identity card and registration form.

7. MEDICAL FITNESS

All fresh admissions will be provisional till approved by the University and shall be confirmed after candidates have been examined medically according to the norms laid down by the college from time to time and found fit.

Students applying for admission to the College should, however, note that, various employment agencies in the Public Sector as well as in the Private Sector and in Govt. Deptt. have prescribed their own standards of medical fitness for engineering graduates seeking employment in their organisations. Those who contemplate to seek employment in these organisations after their graduation should verify for themselves if they satisfy these standards of medical fitness before they decide to join the college, so as to avoid disappointment later. It should be clearly understood, however, that the college takes no responsibility whatsoever in this regard.

8. PRACTICAL TRAINING

Practical Training for B.E. Students is an integral part of the curriculum and in built into the courses of study. Students are introduced to Industrial Practices through training in the college workshops and in factories, installation, works etc. as stipulated under

the relevant University Ordinance according to the following programme :

(i) 4 weeks in the College workshops in the winter vacation after third semester for Civil/ Electrical/ Electronics and Communication / Computer Engineering students.

(ii)4 Weeks in the College Workshops in the summer vacation following the fourth semester Mechanical/Production Engg. students.

(iii) 8 weeks in the summer vacation following the sixth semester in Industries situated in and around Delhi for all branches of Engg.

(iv) 8 weeks during winter vacation after seventh semester in large scale industries for all branches of Engg.

Parents/guardians of applicants should note that for the supervised in-plant practical training as at (iii) and (iv) above, students will be sent to industrial organisations, both in and outside Delhi, depending upon the availability of training places. Their attention is particularly drawn to the undertaking under item No 24 (b) on the application form. No relaxation from this undertaking can be given except under very special circumstances.

Parents of the students will be responsible for any damage caused during the practical training.

9. FEES

The fees are to be paid in two instalments. The first instalment is to be paid in July/August and the other in January at the beginning of the even semesters, in cash only and not by cheque/postal order or money order. No part payment will be accepted.

All deposits are payable in full on admission and are refundable when the student leaves the institution after deducting all dues as determined by the Principal. The Institution shall have the right to forfeit the security deposits, if it is not claimed within three years of the candidates ceasing to be on the rolls of the institution.

"Fees" will not be refunded in respect of B.E./B.E. Tech/M.E./M.Sc. (Applied Physics)/Ph.D. course, unless the student joins a corresponding course elsewhere and the vacancy so caused is filled up by another student on or before 31-8-95 for B.E. M.E./M.Sc. (Applied Physics) courses. For refund, the student should apply

through the Principal/Director of the institution he joins, failing which no refund will be admissible.

Fees for B.E. /M.E./M.Sc. (Applied Physics)/ Ph.D.

Session Dues	*First instalment payable in July/ Aug. Amount R.*	*Second instalment payable in Jan Amount in Rs.*
A' Tution Fees	90.00	90.00
B' Deposit at the time of admission		
(i) Security Deposit (Refundable)	1000.00	
(ii) Library Security (Refundable)	500.00	
(iii) Education tour Money	200.00	
(iv) Alumni Fee	100.00	
C' Other fees		
(i) Sports (Semester)	50.00	50.00
(ii) Mid term Exam& Stationery (Semester)	80.00	80.00
(iii) Medical (Semester)	25.00	25.00
(iv) Cultural Society (Semester)	50.00	50.00
(v) Department Society (Semester)	30.00	30.00
(vi) University Enrolment Fees (Annual)		
First Year	30.00	
Other Years	15.00	
(vii) Delhi University Student Union (Annual)	1.00	
(viii) S.H.W.Project (Annual)	1.00	
(ix) U.G.C.Fees (Annual)	1.00	
(x) University athletics Fees (Annual)	5.00	
(xi) University Culture Council (Annual)	5.00	
(xii) College Magazine (Annual)	50.00	
(xiii) Campus Interview Fee (Annual)	50.00	
(xiv) Delhi University Development Fees (Annual)	100.00	
Total First Year	**2368.00**	**325.00**
Other years	**553.00**	**325.00**

Note: Ph.D. Students need not pay B(iii)

Fees for B.E. (Tech.) Part-time Course

Session Dues	*First instalment payable in July/ Aug. Amount Rs.*	*Second instalment payable in Jan Amount in Rs.*
A; Tution Fees	90.00	90.00
B' Deposits at the time of Admission (Refundable)		
(i) Security Deposit	1000.00	
(ii) Library security	500.00	
(iii) Alumni Fee	100.00	
C' Other Fees		
(i) Sports (Semester)	50.00	50.00
(ii) Stationery (Semester)	80.00	80.00
(iii) Medical (Semester)	22.00	20.00
(iv) Department Society (Semester)	30.00	30.00
(vi) University Enrolment Fee (Annual)		
First Year	30.00	
Other Years	15.00	
(vii) S.H.W.Project (Annual)	1.00	
(viii) U.G.C.Fees (Annual)	1.00	
(xi) University Athletic Fees (Annual)	5.00	
(x) University Culture Council (Annual)	5.00	
(xi) College Magazine (Annual)	50.00	
(xii) University Development Fees (Annual)	100.00	
Total First Year	**2064.00**	**270.00**
Other Years	**449.00**	**270.00**

If a student fails to pay tution fees etc. even with delay fine within one month of the specified date, he /she shall cease to be a student of the college and his /her name is likely to be struck off the roles of the institution.

10. Registration of Foreign Students

University registration Fee from every Foreign student, seeking admission to a course of study in Delhi College of Engg./Delhi Institute of Technolgy will be charged at the rates given below :

1. Seeking admission to Graduate Courses	US $ 150 or Rs. 4800/-
2. Seeking admission to PG Courses	US $ 200 or Rs. 6400/-
3. Seeking admission to a course leading to research work	US $ 250 or Rs. 8000/-

11. HOSTEL FACILITIES

Hostel accommodation for the male students on rolls will be allotted to full-time day students whose parents are not residents of Delhi/New Delhi, strictly on merit . However, if seats are available, Delhi students will be accommodated. Application for hostel seats should be submitted in the prescribed form. No ex-student shall be allotted any hostel accommodation.

Girl students may please note that there is no girls hostel attached to the college in the Kashmere Gate Campus and the girl students will have to make their own arrangements for their stay.

All the Hostel Residents shall abide by the Hostel Rules. Any violation of the Hostel rules will be viewed seriously. the Hostel wardens are fully competent to deal with the residents in the manner the situation demands.

It must be clearly understood that no items like jewellery, electrical gadgets etc., are to be kept inside the hostel rooms.

Hostel rent is payable in advance in 2 instalments. "Rent" also includes furniture rent.

For the payment of Hostel rent and other charges there would be two terms as given below.

HOSTEL CHARGES (for Kashmere Gate Campus)

	I semester July to Nov.	*II Semester Dec.to April*
Rent (per semester)	35.00	35.00
Electricity & Water charges	150.00	150.00
Hostel security Deposits (Refundable)	1000.00	
Mess security Deposits at the time of joining the hostel (Refundable)	1000.00	
Mess Advance	900.00	
Total	**3085.00**	**185.00**

Actual mess bill will be calculated on month to month basis. At present it varies between Rs.600/- per month to Rs. 750/- per month.

All the hostel residents are required to vacate their rooms within one week of the last examination each year. The rooms will be re-allocated at the beginning of the academic session.

Students who are required to stay in the Hostel beyond the first or second term, for genuine reason, under special circumstances will be allowed on payment of @ Rs.300/- per month (Rent plus elect./water charges).

At any time during the course, a student may be required to pay additional deposits or fees to cover increased cost.

For all enquiries regarding Hostel accommodation, students should contact the Hostel office in West hostel.

12. FEE CONCESSIONS, SCHOLARSHIPS, FINANCIAL ASSISTANCE, MEDALS & PRIZES ETC.

(1) Each session, full-freeships and Half-freeships to 10 percent of the students on rolls in each course will be available on grounds of merit-cum- means. Students are advised to be on the look out for the notices, asking for application for the award of these freeship.

(2) Scheduled Caste/Scheduled Tribe students are entitled to Fee Concessions subject to the fulfilment of certain conditions.

(3) Every student admitted to M.E. full time course will be awarded a Scholarship of Rs. 1800/- p.m. from the date of

admission or commencement of instructions whichever is later, for a maximum period of 18 months subject to the rules made in this respect. Qualifying in GATE is essential. These students will be required to undertake teaching assistance of B.E. classes to a maximum extent of 8 to 10 hours per week. They are also entitled to Rs. 3000/- contingent grant per annum.

(4) Every student admitted to Ph.D. full time course will be awarded a Scholarship of Rs. 2400/- p.m. if he holds M.E./ M.Tech and Rs. 1800/- p.m. if he holds B.E./M.Sc degree, from the date of admission, for a maximum period of 36 months subject to the rules made in this respect. These students will be required to undertake teaching assistance of B.E. classes to a maximum extent of 8 to 10 hours per week. They are also entitled to annual contingent grant.

(5) Some limited **financial assistance** is made available by University Grants commission to really needy students towards mess charges, fees, books, clothing, etc. This is disbursed on the recommendations of a Committee set up for the purpose in the college.

(6) Following **scholarships** are awarded annually by the University of Delhi.

(i) **Pandit Man Mohan Nath Dhar Scholarship**, not exceeding two in number, of the value of Rs. 100 p.m.. each to the deserving and needy students studying in the University in the undergraduate classes.

(ii) **Inder Kohli Anand Kohli Scholarships**, two in number, each of the value of Rs.100 p.m. to the needy and deserving students who pass the Senior School certificate Examination, New Delhi, or equivalent in first division and join any one of the first degree courses in the Faculty of Technology.

(iii) **Man Mohan Krishan Kaul Scholarships**, each of the value of Rs.100 p.m. to the deserving and needy students who join the first year of the B.E. Elect/Electronics/Mech./Civil Courses. The number of scholarships is likely to vary from year to year.

(iv) **Smt. Savitri Agnihotri Scholarships**. two in number of the value Rs. 100 p.m. each to the needy and deserving

students who join Ist degree course in any branch in the Faculty of Technology in Delhi College of Engineering (income ordinarily not exceeding Rs. 750 p.m.)

(7) Merit And Merit-cum Means Scholarships:

The college awards the following scholarships :

(i) Merit Scholarship of the value of Rs.100 per annum each payable in lumpsum, with exemption from tuition fees for the full session and a merit certificate.

(ii) Merit-Cum-Means Scholarships of the value of Rs.75.00 p.m. each with exemption from tution fees for the full session. The total number of the above mentioned scholarships in a year will be limited to 25 per cent of the total number of students on rolls in the college during the year.

(8) Students are also entitled to the scholarships offered by the respective State/Union Trritories under the National scholarship Scheme of the Government of India.

(9) Students may also apply to the respective State Government, wherever applicable, for loans for pursuing their studies.

(10) **(i) Medals**

(a) The following gold medals are awarded by the University of Delhi:

(i) **President of India Dr. Shankar Dayal Sharma Gold Medal** Awarded by the University to a student adjudged as the best student of the year on basis of the highest proficiency including conduct, character, academic excellence, extra-curricular activities & social service.

(ii) **L.Jogeshwar Nath Gold Medal** to the best candidate in Technical Education.

(iii) **Rai Sahib Pt. Shri Ram Sharma Memorial Gold Medal**: To the candidate who obtains the highest percentage of marks amongst successful candidates for the B.E. Civil Engineering Examination obtaining a first class.

(iv) **Shri D.V.Kohli Memorial Medal**: To the best candidate who secures the highest percentage of marks amongst successful candidates for the B.E. Electrical Engineering Examination obtaining a first class.

(v) **Engineering Projects India Ltd. Gold Medal**: To the best candidate who secures highest marks in the B.E. (Electronics & Communication) Examination.

(vi) **Babu Ganpat Rai Gold Medal**: To the best candidate from amongst the successful candidates for all the M.E. Elect./Mech./Civil Engineering Examinations taken together in a particular year.

(b) **The following medals are awarded by the College at the College Degree Distribution Ceremony.**

1. **Lt. Governors Gold Medal** awarded to an outgoing student of final year adjudged as the best student of the year on the basis of all round performance.

2. **Dr S.P. Luthra Gold Medal** awarded to the best performer in Mechanical/Electrical Engineering from amongst the graduates of the year.

3. **IEEE P. Kundu Gold Medal** awarded to an out going student of Electrical/Electronics & Communication and Computer Engg. whose performance is adjudged as best in Industrial Practical Training.

4. **Smt. Jagdamba Devi Shukla Gold Medal** awarded to an outgoing female student of final year who secures highest marks in B.E. Courses irrespective of any branch of engineering.

5. **Pt. C.L. Shukla Gold Medal** awarded to an outgoing male student of final year who secures highest marks in B.E. Courses irrespective of any branch of engineering.

(ii) Prizes & Scholarships

(a) **Foundation Prize:** To the best candidate who secures the highest marks in the total of two papers in optional groups at the B.E. (Mechanical Engineering) Examination.

(b) The following Prizes are awarded by the college.

(i) Prizes of the value of Rs.50/- each for standing first in workshop practice in the I/II B.E. Examinations.

(ii) Prizes of Rs.25/- each for standing first in a paper/ subject in every semester.

(iii) A Prize of Rs.100/- for standing first in project work in the final year examination.

(iv) **Prof. J.B.Pd. Tripathi Memorial Scholarship** of Rs. 2400/- awarded each year to a student who has scored the highest marks in Chemistry in first year BE courses at DCE.

(v) **Sarita Kalra Scholarship** of Rs. 1800/- once in a year is awarded to those 1st Semester students of the college who obtain the highest marks in Electronics & Communication, Elect Engg. Mech. Engg., Prod. & Ind. Engg. and Civil Engg. branch

(vi) **Usha Rectifier Prize** of Rs. 1000/- once in year is sponsored by USHA Rectifire Corpn. (INDIA) Ltd. and awarded to a student who is adjudged the best student in Electronics & communication Engg.

(vii) **Radhe Shyam Goel Memorial Prize** (2 Nos.) of Rs. 500/- each awarded to the best performer in final B.E. (Elect.) and B.E.(Elect.) and B.E. (Electronics & Communication).

(viii) **Shri Ram Chandra Goela Memorial Prize** (2 Nos.) of Rs. 500/- each to be given in the form of books to the best performer in final year B.E. (Mechanical) and B.E. (Computer). Recipients of prizes should be from rural background.

Any amount pertaining to refund of fee, stipend, Merit Scholarship, Merit-cum- Means Scholarship, prizes, if not claimed by the students within the prescribed period, will be remitted back to the Pay and Accounts Officer concerned and the same will not be re-drawn whatsoever the reason may be.

Recipients of Medals and Prizes of the previous year are given at the end.

13. IMPORTANT ACADEMIC RULES

1. Every student should always carry on person the Identity Card to be supplied by the Institution on submission of two copies of Photograph (passport size/front pose) immediately after admission and re-endorsed each session. This will help him/her establish his/her identity on public transport, for drawing prizes and scholarships, for receiving money orders and postal articles etc.

2. Every student must keep at least 75 percent attendance separately in Lectures including tutorial, and practical classes.

For assessing the candidate, periodical tests, assignments and quizzes are conducted. In case of B.E.Tech./M.E./M.Sc. (Applied Physics) Courses, these marks constitute years work marks.

For B.E.Tech/M.E./M.Sc. (Applied Physics) Students

If the attendance requirement is not met with and or the minimum years work marks are not secured even in one subject, the student will be detained in the same class. He/she will have to study the semester/year again whenever taught.

For B.E.Students

The registration of the student stands cancelled if he/she fails to keep the attendance requirement. There are no separate year work marks in case of B.E. students in the new examination scheme in force since 1990-91 session. In this scheme, the candidate is required to score a minimum of 40 percent marks in each subject failing which he is to reappear in that subject as and when offered. He is further required to abide by the rules and regulations governing the new examination scheme.

3. Educational tours to factories, mills, workshops and the other places of interest are arranged periodically and government also contributes to some extent towards the travelling expenses of the students. As these tours are of great educational value, it is compulsory for every student to undertake them according to the programme fixed by the institution. On return, a comprehensive report on the tour is to be submitted by the student.

4. Disciplinary action will be taken against any student using unfair means in examination/tests.

5. The name of the institution depends on students and their conduct in class rooms, play field, functions, hostels and in public places. If any student falls short of gentlemen's code of conduct anywhere, the Principal will enforce discipline by imposing appropriate penalties including rustication from the college.

6. During practical training all students should maintain a day-to-day record of their work and observations in the prescribed Practical Training Diary.

7. At the time of admission every student shall be required to sign a declaration. "I submit myself to the disciplinary jurisdiction of the Vice- Chancellor and the several authorities of University, who may be

vested with authority to enforce discipline under the Act, the Statutes the Ordinances and the rules that have been framed by the University".

Admission to the College implies acceptance by the student and by his/her parents/guardian of all provisions given in the College prospectus, University Calendar or any changes in University /College rules, regulations, statutes, ordinances, examination schemes, syllabi, fee, etc. that may be made from time to time.

8. A student who has been admitted to the B.E. Course will have to acquire atleast 25 credits by the end of two semesters failing which he will be required to discontinue the studies.

9. Every student is required to submit typed copy of his/her project report/thesis /dissertation with illustrations as required for various University Examinations. This will remain the property of the Institution.

14. COMPUTER CENTRE

The College has a main frame computer ICIM 6080.

UNIX based 386 system with 16 terminals, CAD/CAM lab with PCB design software are also available. Twenty PC XT-486 have recently been added to the Computer Engineering Laboratory.

Based on various state-of-the-art computer systems, there is a well equipped centre in the Department of Mathematics.

A good number of PC-ATs, are available in various departments to cater to the specialised requirements.

Computer programming is an integral point of B.E./M.E./M.Sc. (Applied Physics) courses. Besides these regular programmes, short courses in programming are offered depending upon the need.

Computational facilities are available for research & development work.

15. PHYSICAL EDUCATION AND SPORTS

Physical education and sports which play a vital role in achieving the aims and objects of Education, are regarded here as a Co-Curricular activity. The students in the college are provided with enough scope for taking part in different games and sports. They are also given chance to organise athletic and other social and cultural activities so that the students may come out successful not only in their professional lives but also imbibe leadership qualities through these activities.

The College has arrangements for most of the major games for both boys and girls. In addition to the day-to-day practice in different games, Interclass, Inter-Departments and Inter-year matches are also held. The College teams participate in most of the Inter-College Tournaments of the University of Delhi. Blazers, special prizes and certificates of merit are awarded to outstanding sportsmen, sportswomen and organisers.

16. CO-CURRICULAR ACTIVITIES

Students are expected to take an active part in all Co-Curricular activities organised by the College. These aim at securing an all round development of the physical and mental faculties and provide an opportunity for use and application of the many sided talents of the students. The student's societies conduct the different co-curricular activities under the guidance of the member of staff.

The Students Association is responsible for all social, cultural and literary activities e.g. College function, entertainment, debates, essay competitions and exhibitions. Departmental societies organise lectures, paper reading seminars, etc. Debating Society, Hindi Parishad also organise several activities.

Technarc, the College magazine is normally issued once a year and carries articles in Hindi and English, both of general and technical nature, from the staff and students of the College.

17. LIBRARY

The College has well-stocked Library containing up-to-date books, journals and other technical literature. The Library is open for reference and study during the normal college working hours. In addition to the main library, the departmental libraries, are also open for reference and study.

18. BOOK BANK

The College runs a Book Bank (under the UGC Book Bank Scheme) intended to assist students, from the economically weaker sections of society, by giving text books on loan to deserving students for a whole academic session according to the rules framed for the purpose.

The College also runs a Book Bank specially meant for Scheduled Caste and Scheduled Tribe students who can borrow books from the Bank for a whole academic session according to the rules framed for this purpose.

19. TRAINING AND PLACEMENT

Matters relating to the employment of the students of the college are looked after by the Department of Training and Placement headed by a Professor. The demand for our graduates has always been very high and about 80% of the students get job through Campus Interviews by the time they take their final examination.

Presently, Campus Selection teams from over 75 leading organisations in the country visit the College regularly to recruit engineers from amongst the final year students.

20. THE CULTURAL COUNCIL OF UNIVERSITY OF DELHI

The Culture Council of the University of Delhi was established in 1989 with the following objectives: to discover, develop, train and promote socio-cultural talents and interests among the students and staff of the University of Delhi.

The Culture Council, established by the EC vide resolution 186 of 25 March 1989, has a number of programmes and projects such as:

(i) The University Choir

(ii)Musiclub: Western and Indian Folk, Light and Classical genres.

(iii) Cineclub: Film appreciation programmes.

(iv) Poets Guild: English, Hindi, Urdu & Regional languages.

(v) Creative Writers Forum.

(vi) Public Speaking Society: Debates, Declamation and Extempore Speech.

(vii) Artclub: fine arts, painting, sketching and cartooning.

(viii) Federation of Theatregroups.

(ix) Photo club.

(x) Dance Ensemble/The Choreographers.

The club and societies are run by student culture-leaders with the guidance and support of Staff Advisers drawn from the departments

and colleges and under the overall executive control of the "Dean Cultural Affairs, DCA."

All student contribute Rs. 5.00 in each academic session. Further details can be had from, the Culture Council, Old Jubilee Hall, Delhi University, Delhi- 110007.

THE FACULTY

PRINCIPAL

Professor P.B. Sharma
B.E.(Mech.),Gold Medallist, M.Sc.(Engg.) Ph.D. (B'ham, U.K.), F.I.E. (India), F.Aero.S

DEPARTMENTS OF ELECTRICAL, ELECTRONICS & COMMUNICATION AND COMPUTER ENGINEERING

Professors

C.L.Wadhwa* *(Power Systems)*	B.E.(Hons),M.E.,Ph.D.,M.I.E. (India)
A.K.Sinha* *(Communication & Microwave)*	B.E., M.Sc.(Engg.),Ph.D., M.I.E.T.E.(India),M.I.E.E.E. (U.S.A.).
D.Roy Choudhury* *(Electronics)*	M.Tech.,D.Phil.,M.I.E.E.E.(U.S.A.).
Ashok Bhattachrya (Digital Electronics)	M.TECH.,DIRE,Ph.D,LMISTE (India) M.I.E.E.E. (USA) (India)
A.K. Tandon *(Elect. Machines)*	B.Sc., B.Sc. (Engg.) M Tech.,Ph.D. L.M.I.S.T.E.(India),M.I.E.E.E.(USA) M.I.E. (India), F.I.E.T.E. Chancellor's Medalist
J.K. Das (Electical Machines)	B.E., M.E., Ph.D., F.I.E (India), M.I.E.E.E. (U.S.A.), L.M.I.S.T.E. (India)
Parmod Kumar *(Power Systems)*	B.Sc.(Engg),M.E., Ph.D.
S.P. Seth (Engg.), *(Power System)*	B.Sc. Engg. (Hons.), M.Sc. Ph.D., F.I.E., F.I.E.T.E.,L.M.I.S.T.E.

Assistant Professors

G.G.Bhise *(Power Systems Control)*	B.E.,M.Sc.(Engg.),Ph.D, M.I.E.(India),M.I.E.T.E.(India), L.M.I.S.T.E. (India).
I.Mohd.Refeequdin (on QIP) *(High Voltage)*	B.E.,M.Sc.(Engg.).
Muralidhar Kulkarni *(Electronics & Communication)*	B.E., M.Tech., L.M.I.S.T.E.
N.K.Jain *(Power (Systems)*	B.Sc.(Engg.),M.Sc.(Engg.), Ph.D., M.I.E. (India),M.I.S.T.E.
Neelam Jasuja *(Computer Engg.)*	B.E. (Hons.), M.Sc. (Tech.), M.S. (U.S.A.)
Prem R.Chadha *(Electronics & Communication)*	B.E.(Hons.),M.Tech., M.I.E.E.E.(USA),F.I.E.T.E.(L) (India), L.M.I.S.T.E.(India),M.I.E. (India).
Shail Bala Jain *(Electronics)*	B.Sc.(Engg),M.Tech.,M.I.E.E.E.(USA), M.I.E.T.E. (India)

Lecturers

Daya Gupta *(Computers Software)*	M.Sc.(Maths),Post M.Sc. Diploma (Computer Science), Member CSI
Lal Bahadur Gupta	M.E.
Manoj Fozdar	M.E.
Neeraj Kumar Bhagat *(Control System)*	B.Sc.(Engg.),M.Tech.,A.M.I.E.(India) L.M.I.S.T.E.

Narinder Kumar *(Electrical Machines)*	M.Tech.
Pragati Kumar *(Control & Inst.)*	M.Tech.
Rajni Jindal *(Computer Software)*	MCA.
Rachna Garg (Controls & Inst.)	M.Tech.
Shiva Sharma❖ *(Computer Software)*	B.Sc.(Engg.), M.E.
Suman Bhowmick	M.Tech.
Uma Nangia *(Control Systems)*	B.E., M.E.

DEPARTMENT OF MECHANICAL ENGINEERING

Professors

N.L.Sachdev* *(Machine Design & Fracture Mechanics)*	B.E.,M.Tech., M.I.E.(India), M.I.S.M.E. (India), M.I.S.T.E. (India).
A.K.Tayal *(Finite Element Analysis)*	B.E.,M.Sc.(Engg.), Ph.D.
R.C. Sachdeva *(Fluid Mechanics & Heat Transfer)*	B.Sc.(Engg.),M.Tech., Ph.D.(Liverpool), F.I.E.(India)
R.K. Bansal *(Fluid Mechanics)*	B.Sc.(Engg.),M.Tech.(Hons.),Ph.D., M.I.E (India)

R.P. Kapoor *(Thermal Engg., Gas Dynamics)*	B.Sc., B.Sc. (Engg.), M.E.
U.C. Jindal *(Composite Metals & Stress Analysis)*	B.E.,M.Tech.,Ph.D., M(ISCMS)
V.K. Mahna *(Instrumentation, Kin.of Machines)*	B.Sc.(Engg.),M.Sc.(Engg.),Ph.D. M.I.S.M.E.

Assistant Professors

A.K. Saluja *(Thermal Engg..Refrigeration)*	B.Sc. ,B.E.,M.Sc.(Engg.), Ph.D. M.I.S.M.E.(India), M.A.S.H.R.A.E.
B.D. Pathak *(Turbomachinery)*	B.Sc.(Engg.), M.Sc.(Engg.).
J.S. Brar *(Rotor Dynamics, Vibrations)*	B.E.,M.E.,Ph.D.
J.S. Kalra *(Flexible Manuf.Systems)*	B.Sc.,B.E.(Hons),M.Sc.(Engg.) M.I.E.(India), M.I.S.T.E.
M.K. Aggarwal *(Thermal Engg.. Refrigeration)*	ND(Mech.Engg.),M.Tech.,Ph.D., M.I.S.M.E. (India), M.H.M.T.S.I.
N.K. Garg *(Tribology)*	B.E.(Hons.), M.E.(Hons),Ph.D.
O.P. Sharma *(Industrial Engg.)*	B.Sc.(Engg.), M.Sc.(Engg.), F.I.E.
R.S. Khanduja *(Thermal Engg.)*	B.E.Tech., M.Sc. (Engg.).

Sagar Maji
(Thermal Engg.)
B.E.,M.Tech.

S.S. Saluja
(Engg.),M(ISCMS)
(Mechanics for Solids)
B.E.(Hons.),M.Sc.

V.S. Susarla
M.I.E.(India),
(I.C.Engines)
B.Sc.(Engg.), M.M.E.,

V.K. Sethi
(Kinematics, M C Design)
B.Sc.(Engg.).,M.Sc.(Engg.)

V.K. Gupta
(Metallurgy & Welding)
B.Sc.(Hons.),
B.E.(Met),M.Tech.(Prod.Engg.)

Lecturers

Naveen Kumar
(Thermal Engg.)
M.Tech.

DEPARTMENT OF CIVIL ENGINEERING

Professors

Arun Kumar*
(Water Resources Engg.)
M.Sc.(Engg.),Ph.D.

A.F.S.A. Aowal
(Environmental Engg.)
M.E.,D.I.C.,M.Sc.,(Engg.),Ph.D.
M.I.W.W.E.

D. Goldar
(Structural Engg.)
B.E.,M.Sc.(Engg.),Ph.D.,
M.S.E.M.(USA),M.I.S.C.M.S. (India)

M. Paldas M.E.,Ph.D.,P.R.S.,(Mouat Medallist), M.I.E.(India)
(Structural Engg.)

Pratima Rani Bose Ph.D.
(Structures & Earth Quake Engg.)

H.S. Bhatia B.E.(Hons),M.E.,Ph.D., M.I.E.(India), M.I.W.P.U.F.
(Environmental Engg.)

Assistant Professors

A.S.Anand N.D.,M.Sc.(Engg.), M.I.E. (India)
(Structural Engg.)

A.K. Sharma Ph. D.
(Water Resources)

A.K.Gupta B.Tech.,M.Tech., M.I.A.W.Q.
(UK)
(Structural Engg.)

G.L. Pamnani M.E.
(Construction of Management)

M.L.Kansal B.Sc.(Engg.), M.Tech.
(Water Resources)

M.P.S. Mahandroo M.Sc.(Hons),Ph.D.
(Geology)

Rakesh Kumar M.Tech., Ph.D.
(Fluid Mechanics)

Rakesh Mehrotra B.Tech.,M.Tech.,M.I.A.W.Q. (UK)
(Environmental Engg.)

V.K. Minocha B.E., M. Tech.
(Environmental Engg.)

Lecturers

A.K.Bhatawadekar⌘ B.E.,M.E.
(Geotechnical Engg.)

D.L. Parmar B.E., M.Tech.
(Structures.)

K.V.John❖ M.Sc.(Engg.), Ph.D.
(Structural Engg.)

Priyanga Raja Kongan A.R. M.E.

DEPARTMENT OF PRODUCTION & INDUSTRIAL ENGINEERING

Professors

A.S.Sachdeva* B.Sc.(Engg.),M.Tech.,Ph.D.,
(Metal Forgings.Prod. & Indl. Engg.) M.I.E.(India), M.I.S.M.E.

B.P.Bandhopadhyay B.M.E., M.Tech.,Ph.D.
(Foundry Technology, Prod. & Indl. Engg.)

Assistant Professors

K.L.Arora B.Sc.(Engg.),M.Sc.(Engg.),Ph.D.,
(Metal Working Prod. Engg.) A.M.S.I., M.I.E.(India)

S.C.Gandhi B.Sc.(Engg.),M.Sc.(Engg.),M.I.S.M.E.
(Prod. & Indl. Engg.)

Suresh Kumar Garg M.Tech.
(Industrial Engg)

Lecturers

Ashok Kumar Madan M.Sc.(Engg.),M.Sc.(Manuf.Tech)
(CAM/Automation) A.M.I.Mech.Engg.(London)

D.R.Gupta❖ B.Sc.,M.Sc (Engg.) (USSR),
(Metal Cutting & Metrology) M.I.S.M.E. (India)

Reeta Wattal B.E.,M.Tech.,M.I.S.M.E.
(Prod. Engg.)

CENTRAL WORKSHOP

Officer Incharge

J.S.Kalra B.Sc., B.E.(Hons.), M.Sc. Engg.,
(Flexible Manu. Systems) M.I.E.(India), M.I.S.T.E.

Foreman Instructor

V. Jagannathan B.E.(Mech.), P.G. Diploma
(Material handling)

Vipin M.Tech.

P.K. Jain B.E.(Mech.)

DEPARTMENT OF APPLIED MATHEMATICS

Professors

J.C.Bhatia* M.Sc., Ph.D., D.Sc.
(Fluid Dynamics)

Assistant Professors

A.B.Mathur M.A., M.Sc., Ph.D.
(Operational Calculus)

M. Acharya M.Sc., Ph.D.
(Graph Theory)

S.K.Sett M.Sc., Ph.D.
(Abstract Wiener Dist.)

Lecturers

Balbir Singh❖ M.A., Ph.D.
(Bio-Mechanics)

Sushma Jain❖ M.A.
(Mathematics)

V.P.Misra❖ M.A., Ph.D.
(Elasticity)

V.P.Jaggi❖ M.Sc.
(Mathematics)

DEPARTMENT OF APPLIED PHYSICS

D.K. Srivastava*❖ M.Sc.

Assistant Professors

V.S. Kaushal (on lien) B.Sc. (Hons.), M.Sc.(Hons.), Ph.D.
(Theoretical Physics)

V.R.Prakash M.Sc.,Ph.D.
(Nuclear Physics)

Lecturers

D.V. Chaure M.Sc.

M.P. Singh❖ M.Sc.

Atish Mazumdar⌘ M.Sc., Ph.D.
(Material Science)

DEPARTMENT OF APPLIED CHEMISTRY

Professor

R. Chandra* Ph.D.,D.Sc.,F.I.C.S.,M.P.R.I. (London)
(Polymer Technology & Applied Chemistry)

Assistant Professors

A.P. Gupta M.Sc.M.Phil,Ph.D.,F.I.C.S.
(Ion Exchange. Polymer Science)

G.L. Verma M.Sc.(Hons.),Ph.D.
(Chem Termodynamics)

R.C. Sharma M.Sc.,Ph.D.
(Electro-Chemistry. Solution Chemistry. Molten Electrolytes

V.C. Garg M.Sc.,D.Phil.
(Physico Inorganics)

Lecturers

K.K. Dhawan❖ M.Sc.
(Organic Chemistry)

P.C. Jain❖ M.Sc.
(Physical Chemistry)

Senior Scientific Officer - 1

R.K.Soni M.Tech. (Polymer Tech.)
(Polymer Tech.)

DEPARTMENT OF TRAINING & PLACEMENT

Professor

A.S.Sachdeva* *(Metal Forgings,Prod. & Indl. Engg.)* — B.Sc.(Engg.),M.Tech.,Ph.D., M.I.E.(India), M.I.S.M.E.

Assistant Professor

B. Chattopadhyay (Gold Medal), *(Prod. Engg.)* — B.M.E.,M.Sc.(Engg.) M.I.E. (India), D.I.M. (IGNOU)

❖ **Lecturer Selection Grade**
⌘ **Lecturer Senior Scale**
* **Head of the Department**

DIRECTOR, PHYSICAL EDUCATION

Dr. A.K. Srivastava — Ph.D

HOSTEL ADMINISTRATION

Dr. J.S. Brar — Warden, West Hostel

Dr. K. Singh — Warden, East Hostel & Security Officer

FOREIGN STUDENTS ADVISOR

Prof. R. C. Sachdeva — Mech. Engg. Department

PUBLIC RELATIONS & PUBLICITY

Dr. A.K. Tandon (Chairman) — Electrical Engg. Department

Shri N.K.Bhagat (Dy. Chairman) — Electrical Engg. Department

STUDENT COUNSELLOR

Prof. R. K. Bansal — Mechanical Engg. Department

SPORTS COUNCIL

Dr. J.S. Brar (Chairman) — Mechanical Engg. Department

V.K. Minocha (Dy. Chairman) — Civil Engg. Department

CULTURAL COUNCIL

Dr. A.K. Saluja (Chairman) — Mechanical Engg. Department

Shri N.K.Bhagat (Dy. Chairman) — Electrical Engg. Department

SPIC MACAY-CO-ORDINATOR

Shri N.K. Bhagat — Electrical Engg. Department

NSS CO-ORDINATOR

Shri G.L. Pamnani — Civil Engg. Department

LIBRARY

Prof. D. Goldar — Chairman, Library Committee

Ms Neelam Jasuja — Dy. Chairman, Library Committee

R.K. Shukla *(Librarian)* — M.A., M.LISc.

Smt Shanti Kapoor *(Assistant Librarian)* — M.A. Cert. Lib. Science

Ram Rattan *(Assistant Librarian)* — M.A., M. LISc.

NODAL CENTRE FOR TECHNICAL MAN POWER

Mohd. Mohisin	Project Officer
Ms. Bharti Matto	Computer Operator/Programmer
Pankaj Jain	Tech. Assistant

ADMINISTRATION

Dr. K. Singh (Deputy Adm. Officer & Head of Office)	MSc. D. Phil
J.S. Kaira (Accounts Officer)	SSA
Ish Kumar (Asstt. Accounts Officer)	SSA
D.R. Mishra (Store Officer)	M.A.
Siri Chand (Office Supdt.)	M.A.
K.K. Goswami (Head Clerk, Acad. Section)	MA, LLB
Agender Singh (Head Clerk, E-I)	M.A.
Tarun Sharma (Head Clerk, E-II)	B.Sc.

DELHI COLLEGE OF ENGINEERING, DELHI

PRINCIPALS

	Name	Tenure
1.	Prof. W. W. Wood	Jan 1941 to Aug. 1946
2.	Prof. R. G. P. S. Fairbairn	Sept.1946 to Sept.1949
3.	Prof. S. C. Sen	Sept.1949 to Dec.1966
4.	Shri S. Ainul Abidin	Jan. 1967 to Jan. 1968
5.	Prof. J. N. Moudgill	Feb. 1968 to April 1971
6.	Shri T. S. Murty	May 1971 to Jan. 1972
7.	Prof. R. C. Narayanan	Feb. 1972 to May 1980
8.	Prof. M. L. Mandal	June 1980 to July 1989
9.	Prof. M. Paldas	Aug. 1989 to Dec. 1990
10.	Prof. P. B. Sharma	Dec. 1990 to date

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