

About IIT Roorkee

Indian Institute of Technology - Roorkee is among the foremost of institutes of national importance in higher technological education and in engineering, basic and applied research. Since its establishment, the Institute has played a vital role in providing the technical manpower and know-how to the country and in pursuit of research. The Institute ranks amongst the best technological institutions in the world and has contributed to all sectors of technological development. It has also been considered a trend-setter in the area of education and research in the field of science, technology, and engineering.

The Institute has completed 150th year of its existence in October 1996. On September 21, 2001, an Ordinance issued by the Government of India declared it as the nation's seventh Indian Institute of Technology. The Ordinance is now converted into an Act by the Parliament to make IIT, Roorkee as an "Institution of National Importance".

The Institute offers Bachelor's Degree courses in 10 disciplines of Engineering and Architecture and Postgraduate's Degree in 55 disciplines of Engineering, Applied Science, Architecture and planning. The Institute has facility for doctoral work in all Departments and Research Centres.

The Institute admits students to B.Tech. and B.Arch. courses through the Joint Entrance Examination (JEE) conducted at various centres all over India.

The Institute

About the Institute

Vision

To be the fountainhead of new ideas and innovations in science and technology and continue to be a source of pride for all Indians.

Mission

To create an environment that shall foster the growth of intellectually capable, innovative and entrepreneurial professionals, who shall contribute to the growth of Science and Technology in partnership with industry and develop and harness it for the welfare of the nation and mankind.

Core Values

- Academic integrity and accountability
- Respect and tolerance for the views of every individual
- Attention to issues of national relevance as well as of global concern
- Holistic understanding, including knowledge of the human sciences
- Appreciation of intellectual excellence and creativity
- An unfettered spirit of learning exploration, rationality and enterprise
- Sensitivity to social responsibilities

Luminaries

Sir Ganga Ram

Sir Ganga Ram (1873) after a brief Service in Punjab P.W.D devoted himself to practical farming. He obtained on lease from Government 50,000 acres of barren, unirrigated land in Montgomery district, and within three years converted that vast desert into smiling fields, irrigated by water lifted by a hydroelectric plant and running through a thousand miles of irrigation channels, all constructed at his own cost. This

was the biggest private enterprise of the kind, unknown and unthought of in the country before. Sir Ganga Ram earned millions most of which he gave to charity. In the words of Sir Malcolm Hailey, the then Governor of Punjab, "he won like a hero and gave like a Saint". He was a great engineer and a great philanthropist.

Raja Jwala Prasad

Raja Jwala Prasad (1900) another highly illustrious alumnus became Chief Engineer, UP Irrigation Department in 1929 and was honoured by the title of Raja by the Government. He prepared the Ganga Canal Grid Scheme in 1924. After retirement in 1932 he established a sugar mill and an agricultural firm in Bijnor, U.P. He was Chairman of the Thomason College Reorganisation Committee (1938-39).

Sir Lakshmi Pati Misra

Sir Lakshmi Pati Misra (1911) possessed many virtues apart from sound engineering skills. A keen sportsman and a brilliant conversationalist he served the Indian Railways with great distinction for 34 years and rose to the highest rank of Chief Commissioner. His association with his alma mater was intimate and full of affection.

Dr. A.N. Khosla

Dr. A.N. Khosla (1916) was a dynamic visionary and engineer of towering stature. He developed the Khosla Disc for precision levelling across rivers and wide valleys and authored the famous Treatise on 'Design of Weirs on Permeable Foundations'. Father of the Bhakra Nangal Project and the driving force behind several other river valley projects in the country, he served as Chairman, Central Waterways, Irrigation and Navigation Commission, and later as Vice Chancellor of the University from 1954 to 1959.

Dr. Khosla changed the look of the University and gave it a reputation to live up to and a role to play in resurgent India. He was the first engineer to hold the exalted office of Governor of Orissa (1962-68). He donated most of his consultancy income to institute the Khosla Research Awards.

Dr. Ghananand Pande

Dr. Ghananand Pande (1925). Joined Indian Railways; achieved distinction as General Manager, Mokameh Bridge over Ganga; retired as Chairman, Railway Board, 1956. Chairman, Hindustan Steels, 1957-60, when public sector steel industry was established. As Chairman, Baby Car project, 1960-61, recommended manufacture of small cars. Vice Chancellor, Roorkee University, 1961-66.

Dr. Jai Krishna

Dr. Jai Krishna (1935) pioneered the study and application of structural dynamics and established the School of Research and Training in Earthquake Engineering (later called the Department of Earthquake Engineering) at Roorkee University. Consultant to a number of projects involving design of seismically safe large structures all over India. Recipient of several awards including International Award of Japan Society of Disaster Prevention, 1988, Shanti Swarup Bhatnagar Award of CSIR, National Design Award of the Institution of Engineers (India), Padma Bhushan.

Sri. Ved Mitra Manglik

Prominent among those who passed out in the 1940's was Mr Ved Mitra Manglik (1940), who rose to become Chief Engineer, Uttar Pradesh Irrigation Department. During his career he developed a focus on the planning and construction of large dams and major water resources projects in U.P. In the mid 1960's he prepared the integrated master plan for hydroelectric development of the Ganga River and its tributaries and certain Yamuna River projects. He was greatly admired for his unassailable integrity and courage. He was a man of many talents. As an inspiring and compassionate leader, he completed and commissioned the Ramganga Dam, a major irrigation project that had turned sick, in a record time of two years. He was also renowned for his deep interest in and knowledge of nature and plants, and for his passion and expertise in gardening. Once, during a conference for Senior Officers he was asked by the Minister, Irrigation Department, for the secret of his extraordinary effectiveness, and he replied, "I hold an iron rod in my hand but my heart is soft as a rose petal."

Dr. Anand Swarup Arya

Dr. Anand Swarup Arya (1953) is specialist in Structural Engineering, Earthquake, Soil and Foundation Engineering, with a long and distinguished record of research, design and consultancy work. Recipient of the FICCI (Federation of Indian Chambers of Commerce and Industry) award (1986) and the National Design Award of the Institution of Engineers (India) (1987). Participant in many UNESCO and other international activities, and member of many international delegations as expert in Earthquake Engineering. Director, International Association for Earthquake Engineering, 1977-80, 1980-84. Fellow, Indian National Science Academy and Indian National Academy of Engineering.

Dr. S.K. Khanna

Dr. S.K. Khanna (1958) has made significant contributions in the area of Highway and Transportation Engineering for a period of over 40 years. He was the first fulltime Chairman of All India Council for Technical Education (AICTE) in 1993, Prior to this, he served as Vice Chairman, University Grants Commission (UGC), and was its Secretary from 1984 through 1990. He was responsible for maintenance of standards and development of higher and technical education in India. He played a vital role for the development of new Education Policy for higher technical education.

Others

During the so-called prestigious decade of 1920's the Institution produced many eminent engineers which included Kunwar Sain (1922), who contributed to the planning of projects concerning Rajasthan Canal and Mekong Valley Development in Thailand; A.C. Mitra (1923), who contributed to the development of irrigation and power systems of Yamuna and Ganga and later became the Engineer-in-Chief of the Uttar Pradesh Irrigation Department; K.N. Kathpalia (1924), who was the Member-Secretary, Fortescue Committee on Thomason College, associated with the drafting of the Roorkee University Act 1948, later became Pro Vice Chancellor of the Roorkee University (1957-61), acted as Vice Chancellor (1959-61); P.L. Verma (1924), who planned and constructed Chandigarh; L.P. Bhargava (1925), who designed and erected improved gates for weirs; Karnail Singh (1927), who constructed the Assam Rail Link in 1947, built Chitranjan locomotive works and became Chairman, Railway Board; Yadav Mohan (1928), who was responsible for the planning and design of Rihand dam and for the construction of the most difficult part of the Rajasthan Canal; H.P. Sinha (1928), who prepared the project for the Trans-Asian Highway from Bangkok to Istanbul; and D.C. Bajjal (1929), who rose to be Chairman, Railway Board and

Chairman Bharat Heavy Electricals. This decade also provided two future Vice-Chancellors of the University - G. Pande (1925) and M.R. Chopra (1929).

Dr. G. Pande lent luster to three high offices he held in succession - Chairman, Railway Board; Chairman, Hindustan Steel; and Vice-Chancellor, University of Roorkee (1961-66). During his regime the prestige of Indian Railways reached its peak; it was also during his tenure that the three public sector steel plants at Bhilal, Rourkela and Durgapur were set up and commissioned. Dr. M.R. Chopra, after successfully completing the gigantic Bhakra Dam Project as its General Manager, became Chairman, Central Water and Power Commission, and later Vice-Chancellor of the University (1966-71). Dr. G. Pande and Dr. M.R. Chopra, with their administrative acumen, made the University one of the foremost centres of engineering education - healthy within and reputed outside.

The most illustrious of the decade of 1930's, Dr. Jai Krishna (1935) joined the teaching staff of the college in 1939 and was Vice-Chancellor of the University from 1971 to 1977. He earned worldwide recognition as an eminent engineer-scientist, as Founder and Director of the School of Research and Training in Earthquake Engineering and as recipient of several prestigious awards and honours.

Prominent among those who passed out in the 1940's was Mr Ved Mitra Manglik (1940), who rose to become Chief Engineer, Uttar Pradesh Irrigation Department. During his career he developed a focus on the planning and construction of large dams and major water resources projects in U.P. In the mid 1960's he prepared the integrated master plan for hydroelectric development of the Ganga River and its tributaries and certain Yamuna River projects. He was greatly admired for his unassailable integrity and courage. He was a man of many talents. As an inspiring and compassionate leader, he completed and commissioned the Ramganga Dam, a major irrigation project that had turned sick, in a record time of two years. He was also renowned for his deep interest in and knowledge of nature and plants, and for his passion and expertise in gardening. Once, during a conference for Senior Officers he was asked by the Minister, Irrigation Department, for the secret of his extraordinary effectiveness, and he replied, "I hold an iron rod in my hand but my heart is soft as a rose petal."; Dr. O.P. Jain (1944), a structural design engineer par excellence who, after a long and distinguished service at the University, served as Director, I.I.T., Delhi (1978-83); Mr. Dinesh Mohan (1943) who became Director, C.B.R.I Roorkee, at a relatively young age and rendered highly meritorious service to the Institute; Dr. Bharat Singh (1945), a renowned expert on Irrigation and Dams who was Vice-Chancellor of the University (1982-86); Mr. Desh Raj Singha (1946) started his career as Assistant Engineer in the U.P. Irrigation Department and rose upto the position of Engineer-in-Chief; Dr. Jagdish Narain (1948), a distinguished soil scientist who was Vice-Chancellor of the University from 1977 to 1982.

Prominent among those who passed out in decade of 1950s are Mr. R.K. Jain (1951) held position of increasing responsibility and rose to the position of Chairman, Railway Board; Dr. Digvijay Singh (1956), started his career as a Lecturer in Mechanical Engineering at University of Roorkee and rose to the prestigious position of Vice Chancellor of the University of Roorkee. He was the Director of Central Road Research Institute, Vice Chairman, All Indian Council of Technical Education; Mr. Krishan Kumar Jain (1957), who started his professional career in USA as a Bridge Engineer in Akron, Ohio. In 1974, Mr. Jain moved to Naples, Florida and started his own Structural Consulting firm of Kris Jain & Assoc.; Mr. J.N. Lamba (1957) held positions of increasing responsibility and rose to the position of General Manager in the Indian Railways; Mr. Ashok Bhatnagar (1957) served as an Assistant Engineer with U.P.P.W.D. and rose to the position of Chairman, Railway Board and Principal Secretary to Govt. of India. He is the only Thomasonian to have attained this distinction (Principal Secretary) through the I.A.S. and Allied services Examination, and only the second Thomasonian amongst the post 1947 batches in the last 60 years; Mr. Narendra Kumar Mittal (1957) started his career as an Apprentice engineer in UPPWD and rose upto the position of Managing Director, U.P. Construction Corporation; Dr. Satish Chandra (1957) was Director of the National Institute of Hydrology, Roorkee; Mr. Harihar Saran Agarwal (1957) started his career with the Irrigation Department in 1957 and rose upto the level of Additional

Member, Railway Board. He was also involved with the computerization of reservations and freight operations information on the railways; Mr. Ravindra Kumar (1957) started his career as Assistant Engineer and rose upto the level of Managing Director, UP State Bridge Corporation; Mr. Narendra Sahai Bisaria (1957) started his career as Lecturer in Civil Engineering at University of Roorkee and rose upto the level of Director in the Central Water Commission, the apex Civil Engineering organization of the country; Mr. Om Prakash Kulshreshtha (1957) started his career as Lecturer in Electrical Engineering at University of Roorkee, he joined UNESCO as Senior Adviser in Electrical Engineering for the Development of the Ceylon College of Technology in Sri Lanka; Mr. Shailendra Kumar Hajela (1957) started his career as Lecturer at University of Roorkee and after a brief stint, he was sponsored by the Govt. of India for research leading to Ph.D. at the Technical University in LLmenau. He was awarded by the University of Roorkee in 1957, the Gold Medal for the Best Engineering Project design in Electrical Engineering and the Thomason prize for being the most distinguished student; Mr. Devi Krishna Gupta (1957) was the Member of Telecom Commission, Department of Telecom; Mr. Jagat Prakash Garg (1957) started his career from the Indian Telecommunication Service (ITS) in 1960 and rose upto the level of Senior Deputy Director General, Telecom Communication of India in the rank of Additional Secretary to Government of India; Dr. Shyam Bahadur (1957) started his career as Lecturer at University of Roorkee and rose upto University Professor, Mechanical Engineering Department, low State University, USA. He was a Member of Sigma Xi, Pi Tau Sigma, Phi Kappa Phi. Rackham Fellowship, University of Michigan, Ann Arbor; Mr. Har Narain (1957) retired as Director in Directorate General of Supplies and Disposal; Dr. Rajinder Kumar Suri (1957) began his professional career as Lecturer in Mechanical Engineering Department at University of Roorkee was the Chief Works Executive, Fedders Lloyd. In 1973, he was selected to take over as Director of CMERI, Durgapur, a CSIR organization. Instead he joined Bharat Heavy Electricals Limited (BHEL), New Delhi to establish BHEL's research program on New and Renewable Energy Sources; Mr. B.C. Srivastava (1957) started his career from the UP Irrigation Department. Later he joined the University of Roorkee as a Lecturer in Mechanical Engineering Department. He worked as General Manager, Delhi State Industries Development Corporation (DSIDC), Executive Director of the National Small Industries Corporation (NSIC). During 1984 he joined World Bank and later moved over to United Nations. He served different in countries at a stretch for over ten years. Initially he was Chief Technical Advisor but finally retired as Director, International Labour Organization in a diplomatic rank but remained an honorary Consultant to the UN and the WB, thereafter.

Prominent among those who passed out in decade of 1960s are Mr. V.K. Agnihotri (1960) who was Member Engineering, in the Railway Board; Dr Vijay Kumar (1961) Member(Technology) Telecom. Commission and ex-officio Secretary to Govt. of India who was instrumental in liberalisation of Telecom Services , Manufacture of Telecom Equipment and rapid growth of Telecom in the country; Mr. Subodh Bhargava (1962) started his career with Balmer Lawrie & Co., Calcutta and rose to the level of Group Chairman and Chief Executive in the Eicher Group of Companies. He is the past President of the Confederation of Indian Industry (CII) and the Association of Indian Automobile Manufacturers and the Vice President of the Tractor Manufacturers Association; Mr. Pradip Baijal (1963) served MP State in various capacities. He was Special/Additional/Joint Secretary, Ministry of Power. He was holding the position of Secretary, Ministry of Disinvestment, Govt. of India. He served as the Chairman, Telecom Regulatory Authority of India; Mr. Arvind Sharma (1963) was the Member, Electrical, Railway Board; Mr. Ashok Soota (1963) was the President of Wipro Infotech, served on the Prime Minister's Task Force for IY Industry and on the Advisory Council for the World Intellectual Property Organization, Geneva. Mr. Soota was name Electronics Man of the year in 1992 by the Electronic Component Industries Association, IT Man of the year in 1994 by Data quest and IT Man of the Year in 1997 by the Computerworld Magazine; Mr. R.K. Singh (1966) joined Indian Railway Service of Engineers (IRSE) and rose upto the level of Chairman, Railway Board; Mr. B.K. Chaturvedi (1969) was the President & Executive Director, Hindustan Motors Limited.

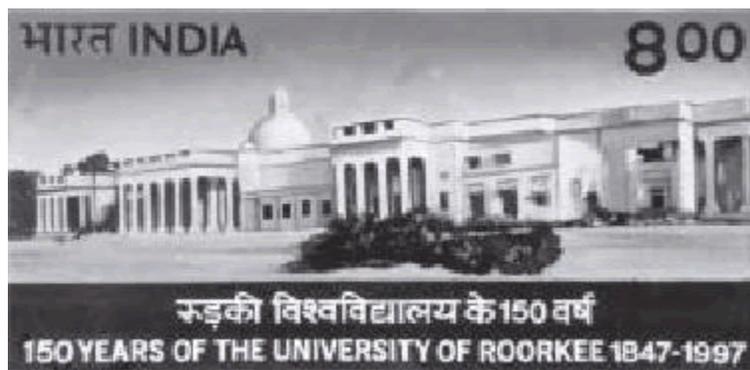
Prominent among those whose passed out in decade of 1970 are Mrs. Vinita Gupta (1973) Chairperson, Quick Eagle Networks Inc. USA.

No narration relating to this University can be complete without mentioning the name of Lt General Sir Harold Williams, K.B.E., C.B., who was associated with it for over 50 years. Professor of Civil Engineering (1936-38) and member of the Senate (1949-55), he took deep interest in the progress of the Institution. Lt. General Williams was Engineer-in-Chief, Indian Army from 1948-55 and Director, C.B.R.I., Roorkee from 1955-62. He adopted India as his home and loved Roorkee in particular. "Roorkee was his Shantiniketan, his Sevagram and finally his Samadhi. He lies buried at the old Anglo Indian cemetery, across the Ganges Canal. The Bengal Sappers, his old regiment, mounts a guard of honour at his grave every year on the 17th of October, which is the anniversary of his death, which occurred at Mussoorie, in 1971.

After the establishment of the University the number of students graduating increased progressively due to enhanced intake in existing branches and addition of new branches. Thus a veritable stream of highly talented young people has since come out of this august institution. They have occupied, and continue to occupy, key positions in Industry, Government and Education, both in India and abroad, thereby bringing fresh laurels to the alma mater.

150 years of glorious past

The University of Roorkee celebrated the completion of 150 years of its existence in 1996-1997. The University of Roorkee, now the Indian Institute of Technology had a modest beginning as the Thomason College of Engineering in the year 1847, and was converted to the First Technical University of India in the year 1949. This incident not only indicates the deep rooted history of this institution but is also an indication of the service that it has provided in the process of technical escalation of our country. The institution has a inimitable record of nurturing the enormous talent of this country and providing them with the best of the scientific and technical education of the world and yet never losing its lustre. The institution has always provided the path and has been idol for the other upcoming institutions and universities to follow. These 150 years have been great years of technical advancement for our country and the institution pledges to provide much more in the upcoming years.



On the occasion of completion of 150 years of service to the nation, memorable events marked the success of the occasion.

Inauguration of the festivities on November 26, 1996 . Chief guest Manmohan Singh, Ex-Finance

Minister of India, took the pleasure of presiding over the ceremony that unveiled the historical treasure of the institution.

The University of Roorkee flag adapted to befit the ceremonies of this memorable occasion, a special mark of the celebration of 150 years of reign. First day Cover of the Commemorative Stamp issued to mark the sesquicentennial celebrations. The first day cover portraits the main building of the University of Roorkee. Release of the Commemorative Stamp by the President of India Dr Shankar Dayal Sharma on January 1, 1997. A statue of Sri Govind Ballabh Pant was also unveiled on this occasion.

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1840-1849

- 1842 : Rurki was still a village on the banks of river Solani
- 1842 : Construction of Ganga canal started
- 1845 : Training school at Saharanpur started under the supervision of Baird Smith
- 1847/1847 : The college remained as Thomason College of Engineering
- 1847/1852 : Duration of first tenure of R Maclagan, the first Principal
- 23 Sep 1847 : Sir James Thomason proposed for an Engineering College
- 25 Nov 1847 : Notification by the government of North Western Province establishing college of Engineering at Roorkee
- 25 Nov 1847 : College Prospectus was issued for the first time
- 1 Jan 1848 : Roorkee College starts functioning

1850-1859

- 29 Aug 1851 : Plan for expansion of Roorkee college was submitted to the Governor General 1852 Printing Press established in the campus
- 21 Sep 1853 : Sir James Thomason, L T Colonel of the government of NWP dies and the College was renamed as Thomason College of Civil Engineering
- 7 Nov 1853: Bengal Sappers and Miners moved to Roorkee

- 1855: Central instruments depot established
- 1857: Entrance test for the College was started

1860-1869

- 1860 : ECS Williams functions as the Principal
- 1861: Municipality of Roorkee was created
- 1863: J G Medley was appointed as the Principal
- 1863: Professional papers on Indian Engineering was started by Principal Medley
- 1864: Roorkee College was affiliated to Calcutta University
- 1869: Coopers Hill college opened in England to train civil Engineers for services in India

1870-1879

- 1870: Publication of college calendar start
- 1871: AM Lang was appointed as the Principal who functioned till 1877
- 1871: Engineering students mess was established properly
- 1872: Football introduced into the campus
- 1872: Polo introduced in the campus
- 1873: Hockey introduced in the campus
- 1873: Annual athletic meet introduced as an annual feature in the campus
- 1875: Coopers Hill college renamed as Royal Indian Engineering college
- 1875: Fees structure changed
- 1877: Many tennis courts were made
- 1878: Change in session from Nov-Aug to May-March
- 1878: Military section of the college was abolished formally
- 1879: Government of India proposes closure of Coopers hill college at England
- 1879: Lower subordinate group divided into Group A and B

1880-1889

- 1880: Course for the Engineering students revised
- 1880: Gymnasium was set up

- 1882: Annual athletic meet temporarily abolished
- 1883: Post of Professor of geology and experimental science was abolished
- 1883: Assistant Engineers exams were suspended
- 1883: Establishment of printing press was reduced
- 1883 : Volunteer corps was abolished
- 1886: Publication of professional paper ends
- 1886: Professional papers on Indian Engineering ceased publication
- 1889: Tennis club established by Indian students

1890-1899

- 1890: Swimming was started as a sport in the campus
- 1891: Branderth relinquished charge
- 1891: F D M Brown took charge as the Principal
- 1892: Short course for the revenue officers set by the college
- 1893: Course on Telegraphy Engg. was started
- 1894: Roorkee College affiliated to Allahabad University
- 1894: Orchid house was built
- 1896: Lt Colonel Sir A P Macdonnel visits college to investigate plans to reorganise and expand it
- 1896: Clock presented by Sir Bir Shamsheer Jung Bahadur of Nepal set on the dome
- 1896: Electrical and Mechanical apprentices class were started
- 1897 : Two posts of assistant Principals abolished
- 1897 : F W Sidwick joins as an instructor for Electrical Engg.
- 1897 : Engineering courses were extended to three years from two years with civil and electrical disciplines
- 1898 : Electricity comes to college
- 1899 : W D McLaren joins as an instructor for Mechanical Engg.

1900-1909

- 1901 : Fortnightly test were replaced by end of term exams

- 1902 Roorkee college wins Hockey shield six time in a row in the university tournament
- 1905 : Affiliation to Allahabad University ends
- 1907 : Royal Indian Engineering college closed down
- 1909 : Electrification of the college is completed
- 1909 : Courses on Electrical and Mechanical Engg. were started at par with Civil Engg. courses
- 1909 : Chemical, Physical, Mechanical and Mineralogical laboratories, Photomechanical Department, Power installation and electric light was inaugurated

1910-1919

- 1910 : A course on Textile Engg. was started
- 1912 : Roorkee College was divested of all low level technical classes
- 1913 : Association of the old boys of Thomason college was formed and called as the Thomason college Engineers Association
- 20 Dec-17 : Whole Gymnasium and Convocation hall burns down due to faulty electric wiring during a red cross show
- 1919 : Cricket in campus revived
- 1919 : Thomason college Engineers Association collapses, Thomasonian publication comes to an end
- Jan-19 : Dispensary struck by lightening

1920-1929

- 1923 : Courses on Electrical and Mechanical Engineering were closed down
- 1927 : Withdrawal of Guaranteed appointments to Roorkee boys during the period of Depression

1930-1939

- 1930 : European students mess closed
- 1931 : College magazine Lion started
- 1935 : First batch of Indian commissioned officers from IMA joined the college for Engg education
- 1935 : Indian students messes were started

1940-1949

- 1941 : Roorkee university alumni association was established, earlier known as old boys association
- 1943 : A unit of craftsmen called the technical pioneer force was formed

- 1943 : A school of military Engg started functioning in the campus
- 1946 : Electrical and Mechanical Engg courses were started and the college was renamed as Thomason college
- 1947 : Central Building Research Institute established by CSIR
- 1947 : The military school was shifted to Pune
- 1948 : Roorkee university act was passed by the provincial legislature earlier this year
- 1949 : Thomason college elevated to university status.
- 25 Nov-49 : the university was inaugurated after 100 years of its establishment
- 25 Nov-49 : Pandit Pant laid the foundation stone of a new building for the University lib.

1950-1959

- 28 Mar-50 : Dr.C.A Hart joined the university as Vice Chancellor
- 10 Feb-51 : Foundation stone of a building of CBRI was laid
- Dec-52 : Foundation laid for the hall to be added to the student's club
- Feb-53 : Sri Bijawat became the Pro Vice Chancellor
- 28 Feb-53 : Dr.C.A Hart resigned
- 1953 : University staff association and club had it's beginning
- 1954 : Sri Ajudhia Nath Khosla was appointed as Vice Chancellor
- 1955 : College Magazine was renamed as Alumni Journal
- Nov-55 : Refresher course were formally inaugurated by Sri V.T.Krishnamchari
- 25 Nov-55 : Pandit J.L.Nehru inaugurated WRDTC
- 1956 : Adarsh Bal nikan came into existence
- 1956 : Student Aid Loan Fund started
- 1957 : Technical Assistant Course were run for two years
- 1957 : Hobbies club came into existence
- Feb-57 : B.Arch was started in the middle of the session
- Jun 57 : Telecommunication Engg. Was sanctioned
- 25 Nov-58 : Nehru was honoured the honorary degree of Doctor of Science

- 1959 : Teacher training programme went on
- 1959 : Rural housing wing was set up
- Mar-59 : Foundation stone of NCC Building was laid
- Aug-59 : Detailed sheme to establish Pilot Production-cum -training centre
- 25-Nov-59 : Dr. Rajendra Prasad was similarly Honoured
- 18-Dec-59 : Khosla relinquished the post of VC
- 1959 : Buiding for a small hospital was built

1960-1969

- 1960 : SRTEE started functioning
- 1960 : Duration of BE Courses were increased to 4years from 3 years consequently no batch passed in 1963
- 15-Aug-60 : Separate departments for mathematics, physics, chemistry, geology and geophysics were constituted
- 1961 : Department. of Architecture got a separate building for itself
- 1961 : First award of doctorate was made : 20-Mar-61 : Shri Ghananad Pande joined as VC
- 1962 : A block of building for geophysics and geology in one wing and another for earthquake was completed
- 1962 : The chinese war threw the BE courses out of gear.
- 1962 : The batch due to pass out in 1964 was accelerated to go out 5 months earlier in january
- 1962 : The batch to be passed in 1965 got out in nov. 1964
- 1962 : Employment information and guidance bureau was set up
- 1962 : E.S recreation was renamed as Univ. Sports Association
- 1962 : Gymnasium building came up
- 1963 : The centenary gate was remodeled
- 1963 : Five more ME courses were added to the existing 9 courses since 1958
- 1963 : Commission for scientific and technical terminology set up a unit to evolve Hindi technical term, it was wound up in 1967
- 1964 : Humanities section was started, it became a department in 1973

- 1964 : Decision to wind up polytechnic, last batch passed out in 1966
- May-64 : Department. of telecommunication separated from electrical dept, it was renamed to electronics and communication
- ~~16~~Jun-64 : The foundation stone of DPT was laid
- ~~Oct~~64 : IIT's pay scale were introduced in the university
- 1965 : Painting and sculpture section was added to hobbies club
- 1966 : The entrance ~~te~~ result was for the first time processed in computers
- 1966 : Sri pande's term as VC came to an end
- 1966 : A teachers hostel was built in Vikas nagar
- ~~31~~Jan-66 : The teacher's wing was closed
- 26 Nov 66 : Dr. Zakir Hussain inaugurated the LBS, she was also honoured with degree of D.Sc
- ~~18~~Nov-67 : Prime Minister Indira Gandhi was honored with the degree of D.ENG, she inaugurated the S.block of E&C Department.
- 1968 : Expansion in postgraduate courses, becoming 21
- ~~2~~Oct-68 : Mahila work Centre was established . Later renamed as Mahila work and welfare centre
- 1969 : 25% seats got reserved for direct admission in UG courses

1970-1979

- 1970 Horticulture and gardening section was added to Hobbies club
- 1970 : Badminton court was completed
- 1970 : Alaknanda club was opened, name was given in 1979
- 1970 : D Class goes to strike on March 1st
- 1971 : First batch of industrial branch was admitted
- 1971 : Five year term of Sri Chopra come to an end
- 1971 : QIP was set up in the university
- 1971 : Dr . Jai Krishna was appointed as VC in September
- 1972 : NSS was started
- 1973 : The Mechanical departmant was renamed the Department of Mechanical and Industrial Engg.

- 1974 : Mangal Ram Memorial Open Billiards Championship started
- 1974 : STREE was incorporated as one of the university's regular departments in April
- 1974 : Constitution of RUSA was passed and it became operative in October
- 1975 : E&C Tower was completed and inaugurated by VC Sri Reddy on 26 November
- 1975 : Philately and numismatic section was added to hobbies club
- 1976 : Traditional way of making all admission through exam was resumed
- 1977 : Dr. Jagdish Narain joined as new Vice Chancellor
- 1977 : Bloody fight between rival factions of students during RUSA election
- 1977 : The non teaching staff went in a strike in May
- 1978 : The university broke ground by taking over DPT(Saharanpur) as one of its integral parts
- 1978 : College Magazine was renamed as Lion
- 1978 : Stargazing section was added to hobbies club
- 1979 : NIH was established in the campus of the Roorkee University
- 1979 : The Roorkee University Regional Computer Centre started functioning in November

1980-1989

- 1980 : Students violence over the suicide of a 4th year student
- 1981 : Welding research lab. Was established under Indo German Technical Cooperation Program
- 1982 : Centre for Microprocessor Application came into being
- 1982 : AHEC was set up
- 1982 : President of Tanzania Mr. Julius Nyerere and his wife visited the campus on 2nd April
- 1983 : Duration of ME courses were reduced to one and half years from two years
- 1983 : UG course in Computer Science and Technology was started
- 1984 : AVRC was established
- 1985 : Seven more centres were added
- 1986 : The USIC (university science instrumentation centre) was recognised as a Instrumentation centre
- 1986 : Department of Bioscience and Biotechnology
- 1987 : E&C dept. was renamed as E&CE

- 1987 : STEP Roorkee was registered as a society
- 1989 : Three more centres were set up

1990-1999

- Jan-90 : The constitution of the Roorkee school for the deaf was approved by the syndicate
- 1992 : The construction of Rajendra Bhawan was completed
- 1994 : A community centre was built near the hangar
- 1996 : Another fifteen centres had been added to the list
- 1996 : Information Superhighway Centre (ISC) was established
- 1998 : Department of Management studies was started.

[Top](#)

2000 - ongoing

- 21 Sept 2001: The Roorkee University was converted to an IIT by an act of Parliament. Dr. D.V. Singh took over the charge of the First Director till the new Director was appointed.
- 2001: Dr. Prem Varma took over the charge as Director from Dr. D.V. Singh on 16th December 2001.
- 2005: The construction of multistoried flats (now Hill View Apartments) was completed
- 2005: Three Centre of Excellence, namely Nanotechnology, Disaster Mitigation and Transportation Systems (CTRANS) were established
- 2005: For the 41st Inter IIT sports meet which was hosted by the Institute, the following works were carried out:-
 1. Renovation of the Sports Pavilion.
 2. Construction of three synthetic International standard Tennis Courts.
 3. Construction of one synthetic International standard Basket ball Court with fencing and proper sitting and lighting arrangement.
 4. Construction of a new Pavilion in the field where Hockey & Football matches are played.
 5. Night lighting was provided for the Cricket practice pitch, the new Tennis Courts, the Volleyball Courts and the Basket Ball Courts, to facilitate Cricket practice/coaching and holding of matches/practice in Tennis, Volleyball and Basketball, after sunset.
 6. Water proofing of the roof of the Badminton Courts and repairs to the wooden floor of the three Courts were completed.
 7. A new filtration plant and water aeration plant were provided for the swimming pool.
 8. Renovation of LBS stadium (relaying of pitch, strengthening of sitting stairs, lighting and watering systems).
- 2006: The construction of the Main Guest House (now NC Nigam House) was completed
- 2006: Dr. S.C. Saxena joined as new Director on 1st June 2006

- 2007: The construction of new Community Centre was completed
- 2007: The construction of new Library building was completed
- 2007: The renovation work of Convocation Hall (SWP Hangar) was completed

Undergraduate

- Academic Programme 2012^{New}

Post-Graduate

- Procedure for M.Tech. Dissertation Evaluation and Proforma(s)-A, B and C to be used for Evaluation of Dissertation
- The Plagiarism Policy of the Institute
- Integrated M. Tech. Programme
- Postgraduate(PG) Programmes
- Academic Curricula (PG)
- PG Ordinances & Regulations
- Fee Structure for M.Tech./M.Arch./MURP Programmes for the Academic Session 2010-11
- Fee Structure for M.Sc. Programmes for the Academic Session 2010-11
- Fee Structure for M.B.A. and M.C.A. Programmes for the Academic Session 2010-11

PhD

- The Plagiarism Policy of the Institute
- Ph.D. Ordinances and Regulations
- Doctoral Programmes
- Teaching and Evaluation System
- Memoranda Of Understanding and collaborative programmes
- **Ph.D. Proformas (I - XII)**
 - Proforma-I - Request for constitution of SRC
 - Proforma-II - For Approval of Courses to be undertaken
 - Proforma-III - Progress Report of Scholar
 - Proforma-IV - Request by Candidate for Comprehensive Examination
 - Proforma-V - Notification for Comprehensive Examination
 - Proforma-VI - Report on Comprehensive Examination and Candidacy
 - Proforma-VII - Progress Report and Recommendation of SRC for Candidacy
 - Proforma-VIII - Report of Mid Term Review / Special SRC Meeting
 - Proforma-IX - Final Report of SRC
 - Proforma-X - Specifications for Thesis
 - Proforma-XI - Candidate's Declaration
 - Proforma-XII - Submission of Thesis for Ph.D.

Departments and Centers

IIT Roorkee is one of the biggest technical institutions in the country having the largest number of academic units. It has 18 academic departments covering engineering, applied sciences, humanities &

social sciences, and management programs, 1 academic centres, 4 supporting service centres and a large number of research centers:

- **Departments**

- Architecture and Planning
- Biotechnology
- Chemical Engineering
- Chemistry
- Civil Engineering
- Earthquake Engineering
- Earth Sciences
- Electrical Engineering
- Electronics and Computer Engineering
- Humanities and Social Sciences
- Hydrology
- Management Studies
- Mathematics
- Mechanical and Industrial Engineering
- Metallurgical and Materials Engineering
- Paper Technology
- Physics
- Water Resources Development and Management

- **Centers**

- **Academic centers**
 - Alternate Hydro Energy Centre
- **Academic Service centers**
 - Mahatma Gandhi Central Library
 - Centre of Nanotechnology (Download pamphlet having information regarding M.Tech and research programme at this Centre)
 - Centre for Transportation Systems (CTRANS)
 - Centre of Excellence in Disaster Mitigation & Management (CoEDMM)
 - Continuing Education Centre (CEC)
 - Information Super Highway Centre(ISC)
 - Institute Computer Centre (ICC)
 - Institute Instrumentation Centre (IIC)
 - Intellectual Property Rights (IPR) Cell
 - Quality Improvement Programme(QIP)
 - TIFAC Core
- **Supporting Service Centres**

- Educational Technology Cell
- Institute Hospital

- **Undergraduate Programmes**

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- The Institute offers eleven undergraduate programmes leading to B . Arch . and B.Tech. degrees, which are of 5 and 4 years duration, respectively. These programmes are in the following disciplines:
- **Undergraduate Programmes**
- **Bachelors Degree**

Sl. No	Academic Department	Programmes
1	Architecture & Planning	B.Arch. Architecture
2	Biotechnology	B. Tech. Biotechnology
3	Chemical Engineering	B. Tech. Chemical Engineering
4	Civil Engineering	B. Tech. Civil Engineering
5	Electrical Engineering	B. Tech. Electrical Engineering
6	Electronics & Computer Engineering	B. Tech. Electronics & Communication Engineering B. Tech. Computer Science & Engineering
7	Mechanical & Industrial Engineering	B. Tech. Mechanical Engineering B. Tech. Production & Industrial Engineering
8	Metallurgical & Materials Engineering	B. Tech. Metallurgical & Materials Engineering
9	Paper Technology	B. Tech. Pulp & Paper Engineering

- **Integrated Dual Degree**

- The Institute offers three Integrated Dual Degree programmes (5 years duration). Admissions are offered through the Joint Entrance Examination(JEE) and students are awarded both B.Tech. and M.Tech. degrees after completion of 5 years. These programme are in the following desciplines:

Sl. No	Academic Department	Programmes
1	Chemical Engineering	B.Tech. (Chemical Engineering) and M.Tech. (Hydrocarbon Engineering)
2	Electrical Engineering	B.Tech. (Electrical Engineering) and M.Tech. (Power Electronics)*
3	Electronics & Computer Engineering	B.Tech. (Computer Science and Engineering) and M.Tech.(Information Technology)
4	Electronics & Computer Engineering	B.Tech. (Electronics & Communication Engineering) and M.Tech. (Wireless Communication)
5	Paper Technology	B.Tech. (Process Engineering) and M.B.A.

- **Integrated Master of Technology**

- Five year Integrated M. Tech. Programme in Polymer Science & Technology has been started from the academic session 2007-08. Admissions were offered through the Joint Entrance Examination (JEE) and students will be awarded Integrated M.Tech. Degree in Poymer Science & Technology after completion of 5 years.
- From the session 2007-2008 , the Institute has started following new 5 year integrated M.Tech/M.Sc Programmes

Sl. No	Academic Department	Programmes
1	Earth Sciences	M.Tech. (Geophysical Technology)
2	Earth Sciences	M.Tech. (Geological Technology)
3	Paper Technology	M.Tech. (Polymer Science & Technology)

- Integrated Master of Science

Sl. No	Academic Department	Programmes
1	Mathematics	M.Sc. (Applied Mathematics)
2	Physics	M.Sc. (Physics)
3	Chemistry	M.Sc. (Chemistry)

During the session 2007-2008, 619 (including IDD and Integrated M.Tech.) students were admitted to different UG programmes and a total of 2220 were registered in different years of UG programmes. All the IITs offer admission to these programmes on the basis of the Joint Entrance Examination (JEE) results.

- **Postgraduate (PG) Programmes**

- The predecessor of the IIT Roorkee, the University of Roorkee, pioneered postgraduate programmes in engineering and technology, way back in 1955. During the session 2007-2008, 654 students were admitted to the PG programmes and a total of 1356 students were registered in these programmes.

- Admission to PG programmes is offered on the basis of GATE score and/or on the basis of the written test and interview. Non Resident Indians (NRI) and foreign nationals are also admitted to PG programmes. Sponsored candidates, including those through Quality Improvement Programme (QIP), form another channel for admission to these programmes. IIT Roorkee is the only institution in the country which has special PG programmes in Earthquake Engineering, Water Resources Development & Management, Hydrology, Welding Engineering, Alternate Hydro Energy Systems and Pulp & Paper Engineering.

- **PG Programmes in Engineering and Architecture**

- **M.Tech./M.Arch. & M.U.R.P.**

Sl.No	Academic Department	Programmes
1	Architecture & Planning	M.Arch. , M.U.R.P.
2	Alternate Hydro Energy Centre	Alternate Hydro Energy Systems Environment Management of Rivers and Lakes
3	Chemical Engineering	Computer Aided Process Plant Design Industrial Pollution Abatement Industrial Safety & Hazard Management
4	Civil Engineering	Building Science & Technology Computer Aided Design Environmental Engineering Geotechnical Engineering (with Diversification in Rock Mechanics) Hydraulics Engineering

		Geomatics Engineering Structural Engineering (with Diversification in Bridge Engineering) Transportation Engineering (with Diversification in Traffic Engineering)
5	Earthquake Engineering	Soil Dynamics Structural Dynamics Seismic Vulnerability and Risk Assessment
6	Electrical Engineering	Instrumentation & Signal Processing Power Apparatus & Electric Drives Power System Engineering Systems and Control
7	Electronics & Computer Engineering	Control & Guidance Computer Science & Engineering Communication Systems Information Technology RF & Microwave Engineering Semiconductor Devices & VLSI Tech.
8	Hydrology	Surface Water Hydrology Ground Water Hydrology Watershed Management
9	Mechanical & Industrial Engineering	Machine Design Engineering Production & Industrial Systems Engg. Thermal Engineering Welding Engineering CAD, CAM & Robotics
10	Metallurgical & Materials Engg.	Industrial Metallurgy Physical Metallurgy Corrosion Engineering
11	Paper Technology	Pulp & Paper Engineering
12	Water Resources Development & Management	Irrigation Water Management Water Resources Development

- **P.G. Diploma (For Sponsored Candidates)**

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Sl. No	Academic Department	Programme
1	Hydrology	Hydrology
2	Water Resources Development & Management	Hydroelectric System Engg. & Management Irrigation Water Management Water Resources Development

PG Programmes in Sciences, Management and Computer Applications

- **M.Tech.**

Sl. No	Academic Department	Specialisation
1	Chemistry	Advanced Chemical Analysis
2	Earth Sciences	Applied Geophysics
3	Physics	Solid State Electronic Materials

- **Sciences**

Sl. No	Academic Department	Programmes
1	Biotechnology	Biotechnology
2	Chemistry	Chemistry
3	Earth Sciences	Applied Geology
4	Mathematics	Applied Mathematics Industrial Mathematics & Informatics

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Sl. No	Academic Department	Programmes
1	Management Studies	Master of Business Administration (MBA)
2	Interdisciplinary	Master of Computer Applications (MCA)

Doctoral Programmes

Research programmes leading to the degree of Doctor of Philosophy (Ph.D.) are available in all academic departments of the Institute. While 89 new candidates were admitted to Ph.D. programmes, a total of 754 candidates are working for their Ph.D. degree in the session 2007-2008. The Ph.D. thesis is evaluated by the supervisor(s) and by two external examiners, one Indian and the other from abroad. If the examiners recommend acceptance of the thesis, a viva voce examination of the candidate is arranged at Roorkee. The recommendations of the Board of Examiners are considered by the Senate , which approves the award of Ph.D. degree to the candidate.

Academic Statistics

The following are the academics statistics for the session 2007-2008.

Statistics 2007-08	
Staff Strength	1562
Academic Staff	342
Administrative & Supporting Staff	1220
Student Strength	4137
Undergraduate (UG) Programmes	1989
Postgraduate (PG) Programmes	1356
Ph.D.	754
Student/Academic Staff Ratio	2.6 : 1

UG/PG Student Ratio	1.4 : 1
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Number of Students admitted for 2007-2008	
Ph.D.	89
M.Tech., M.Arch. and MURP	494
M.Sc./ M.Tech (Earth Sciences)	81
M.B.A.	51
M.C.A.	28
B.Tech. and B.Arch.	619
Preparatory Course B.Tech.	72

Teaching and Evaluation System

Each academic year is divided into two semesters and teaching programmes are organized around the credit system. Teaching includes lectures, tutorials, practicals, projects, seminars, dissertations and field & industrial training. The Institute lays special emphasis on the tutorial system, which is based on a close personal interaction between students and teachers. The undergraduate students have to undergo a comprehensive project during the final year of their studies. A distinct feature of the education system at Roorkee is the emphasis on overall personality development and instilling in students the qualities of leadership. Thus, extra curricular activities are an important part of student life. The Institute has provided the largest number of engineers in the task of nation building.

Academic committees and faculty board of each Department use course - appraisal to review the course contents. At the end of each semester every student gives a feedback on the course content, its relevance and performance of the teacher. Feed back from students has helped in continually improving courses and teaching quality.

Memoranda of Understanding and collaborative programmes

The Institute encourages active involvement of faculty and students in collaborative programmes, both at the national and international level. These programmes range from exchange of students and faculty; research work; undertaking projects; development of academic programmes and training of students; exchange of publications, data, teaching materials; ensuring optimum utilization of infrastructure facilities; conservation of lakes and rivers; conducting short/long term courses; establishing symbiotic relationship between the participating bodies/countries in the fields of science and engineering; launching IT initiatives in the fields of e-Governance; e-education; telemedicine, GIS and other ambits of IT applications and related fields. The Memoranda of Understanding approved by the Board of Governors of the Institute are as under:

I. International Level

- The University of Western Ontario, Canada
- Hochschule Fur Technik und Wirtschaft - University of Applied Sciences, Dresden, Germany
- Wayne State University, USA
- Concordia University, Canada

- Royal Melbourne Institute of Technology (RMIT), Australia
- Freie Universitat, Berlin, Germany
- Friedrich - Alexander-Universitat Erlangen-Nuremberg
- The University of Glasgow, (U.K.)
- School of Computing, National University of Singapore, Singapore
- Vali-e-Asr University, Rafsanjan, Iran
- Water Resources University, Hanoi, Vietnam
- Ecole Speciale Des Travaux Publics, Du Batiment ET DE L'Industrie (ESTP), France
- Federal University of Itajuba, UNIFEI, Brazil
- Voith Hydro, Heidenheim, Germany
- School of Technology and Architecture, Lucerne, University of Applied Sciences, HTA, Switzerland
- Al Baath University of Syrian Arab Republic
- University of Peradeniya, Srilanka
- Linkoping University (LIU), Sweden
- Lulea Tekniska Universitet (LTU), Sweden
- Cardiff University, Cardiff, United Kingdom

II. National Level

- Himalayan Institute Hospital Trust, Dehradun
- Central Power Research Institute, Bangalore
- Post Graduate Institute of Medical Education and Research, Chandigarh
- IBM CAS Bangalore
- Hindustan Aeronautics Limited, Accessories Division, Lucknow
- Bengal Engineer Group & Centre, Roorkee
- National Institute of Technical Teacher's Training and Research, Chandigarh
- Central Building Research Institute Roorkee
- Prama Jyoti Foundation, New Delhi
- India Meteorological Department, New Delhi
- Army Technology Centre, HQ Technical Group EME, Directorate General of EME

International Cooperation

The Institute has played a very important role in international cooperation, particularly for developing countries, in the fields of engineering, applied sciences and social sciences including management education. It attracts a very large number of students from over 50 countries. Water Resources Development and Management (WRDM) and the Department of Hydrology run special postgraduate (PG) programmes for students of Afro Asian region. The Institute has awarded undergraduate degrees after 4 year of study to special groups of students from Tanzania, Ethiopia, Lesotho and Nepal, Bhutan and Rwanda.

Admission of foreign nationals to various Postgraduate and Research Programmes is made through the following channels:

1. Indian Council of Cultural Relations (ICCR)
2. Technical Cooperation Service of Colombo Plan
3. Indian Technology Research Services

4. UNESCO
5. World Meteorological Organisation
6. Indian Technical and Economic Cooperation (ITEC)

Courses and Specialisations

The main aim of undergraduate education at IIT Roorkee is to enable students to face the wide-ranging changes taking place in the fields of technology, environment and management with confidence. This includes undertaking design, development, construction, production, managerial and entrepreneurial activities, and higher studies in their chosen or allied interdisciplinary fields of study.

The institute lays great emphasis on assisting students in the development of character and self confidence with management traits. To achieve these goals, the curriculum lays more stress on learning and less on teaching. Efforts are made to encourage self-learning, creative thinking, critical evaluation, spirit of inquiry and imbibing the culture of life long learning.

The institute offers undergraduate programmes leading to bachelors degree in many disciplines and also offers five-year integrated dual degree programmes as given earlier.

Structure of Undergraduate/ IDD Programmes

The four year B.Tech programme comprises of courses divided in four distinct areas namely: Institute Core, Department Core, Departmental and Institute Electives and co-curricular and extra curricular activities. The IDD programmes comprise of all the above courses of B.Tech Programme, besides having a number of courses on specialized M.Tech programme and dissertation

Institute Core

The institute core courses are common to all B.Tech programmes and are planned to give the students a firm base. These include courses on Mathematics, Physics, Chemistry engineering Sciences and Arts and Humanities and Social Sciences, Biotechnology and Management.

Departmental Core

The departmental core consists of courses considered essential for a chosen engineering discipline, including laboratory courses, practical training and a major project.

Institute Electives

The institute electives are the courses offered by different academic Departments/ Centers to the students of other disciplines. The students are free to select a number of courses from a basket of courses offered, deepening upon their interests and their course structure.

A list of the various courses offered by each department is given below

- Architecture and Planning
- Alternate Hydro Energy Centre
- Biotechnology
- Chemical Engineering
- Chemistry
- Civil Engineering

- Earth Sciences
- Electronics and Computer Engineering
- Electrical Engineering
- Earthquake Engineering
- Humanities and Social Sciences
- Hydrology

- Management Studies

- Mathematics
- Mechanical and Industrial Engineering
- Metallurgical and Materials Engineering
- Physics
- Pulp and Paper Technology
- Water Resources Development and Management