

## **Director's Address to New Students on July 19, 2011**

It gives me immense pleasure in welcoming the new entrants to this historic Institution, the Indian Institute of Technology Roorkee. On behalf of the entire campus community, I congratulate you all for your success in JEE, GATE, JAM or JMET, and extend a hearty and warm welcome on joining as the new and very special members of this privileged community.

The Institute has a standing of about 164 years in all, of which 101 years as a College of Civil Engineering, 53 years as University of Roorkee and 10 years as IIT Roorkee. It has its roots in the Roorkee College, which was set up in 1847 as the first engineering college in the whole of British Empire of that time, and was renamed as the Thomason College of Civil Engineering in 1854. The College laid the foundation of modern engineering education and the use of civil engineering practices in the infrastructure development of the country. The infrastructure in the forms of dams, impoundments, canals, roads, highways, railway lines and bridges etc. in the country, all has been the outcome of the modern engineering education that started with this college. Education in Electrical and Mechanical Engineering, as offshoots of Civil Engg., also started for the first time in India at this very college, way back in the year 1897. The Thomason College of Engineering got elevated as the first Engineering University of the country in 1948 through the Roorkee University Act, 1947 passed by the United Provinces Legislature. In 1955, the University of Roorkee also became the first institution in the country to offer postgraduate programmes in engineering and technology.

On September 21, 2001, the University of Roorkee was converted to an IIT by the Government of India through an Act of Parliament, and was thus recognized as an Institution of National Importance.

There are seven old and large IITs, namely IIT Bombay, Delhi, Guwahati, Kanpur, Kharagpur, Madras and Roorkee. In the years 2008 and 2009, eight new IITs, with three specializations each, were added to the list, thereby raising the number of IITs to 15.

Over the years, the IIT system has evolved to reach and hold a unique position of pride in the technical education system in India. This system is known world over for providing quality technological and scientific education and an environment conducive to new and path-breaking research and development in frontier areas of engineering, technology and science. The pursuit of technological excellence in a highly competitive environment is the benchmark of the IIT system in the country.

University of Roorkee had a rich heritage of past and had its standing as one of the best technical Universities in the world. The rich traditions of this historic institution combined with the brand-equity of the IIT system have produced, in IIT Roorkee, an institution par excellence. My new young friends will find the environment at IIT Roorkee, which is a blend of tradition and modernity, unique in itself. IIT Roorkee is also unique with its lush green campus, the stately Ganga Canal flowing nearby and the Himalayas overlooking the campus.

The IIT Roorkee is fully supported by the grants received from the Ministry of Human Resource Development (MHRD), Government of India.

Indian Institute of Technology Roorkee has its main campus at Roorkee in Uttarakhand, which is 365 acres of area, and a second campus of 25 acres at Saharanpur in Uttar Pradesh. An extension centre at Greater Noida close to Delhi has also become functional recently.

As of now, IIT Roorkee has 19 academic departments and 3 centres of excellence, 6 academic service centres, namely Computer Centre, Information Superhighway Centre, Instrumentation Centre, Centre for Continuing Education, Quality Improvement Programme Centre and Central Library, and several other units like Construction and Maintenance Division, Training & Placement Cell, Intellectual Property Cell and Education Technology Cell.

The Institute offers 11 Under-Graduate programmes in engineering and architecture, five Integrated Dual Degree (IDD) programmes, three Integrated M.Tech, three Integrated M.Sc., and 54 Post-Graduate programmes in engineering, architecture, sciences, computer

application and business administration. Besides, there are Ph.D. degree programmes in all academic departments, academic centres and Centres of Excellence. Post-doctoral research is going on in several disciplines. Admissions to the Under-Graduate, Integrated Dual Degree and Integrated M.Tech./M.Sc. courses are made through a nation-wide Joint Entrance Examination (JEE). Admissions to post-graduate courses are made on the basis of GATE, JAM or JMET. In 2012, admissions to MBA programme at all IITs will be on the basis of CAT in place of JMET.

This year, a total number of 4,68,240 candidates appeared in JEE-2011, for admissions to various courses in the fifteen IITs., IT BHU Varansasi and ISM Dhanbad. A total of 13,602 candidates have been declared qualified to seek admission for 9618 seats. A total number of 59,485 candidates appeared from IIT Roorkee zone. Out of which 1256 candidates qualified. Mr. Kunal Chawla is the topper candidate from the Roorkee zone with All India Rank '6'. This year 1,08,647 girls candidates appeared for JEE-2011, out of which 1491 candidates qualified. Km. Sumegha Garg who appeared in JEE-2011 from IIT Roorkee zone topped this year's All India list of successful girl candidates.

In the last Academic Session, that is 2010-11, we had a total student strength of about 6100, including about 3400 students in undergraduate, IDD and Integrated 5-year programmes, 1800 postgraduate students and 900 Ph.D. scholars. The ratio of girls to boys has been increasing over the years, and in the last session there were 13.4% girl students. IIT Roorkee awarded Ph.D. degree to 134 research scholars in convocation of 2009 and 140 scholars in convocation 2010. The number this year is expected to go upto 160. These numbers are favourably comparable with all other IITs. The Ph.D. enrolment is going to touch the figure of 1100 this semester and, after another two years, it would cross the 1500 mark. At present, the intake to various programmes through JEE is 1155 and the intake to PG programmes is 1085. After two years, the total student strength on the campus is going to be around 8500.

The Institute has highly qualified and dedicated faculty of about 400, comprising Asstt. Professors, Associate Professors and Professors. There is flexible cadre, wherein an Asstt. Professor can rise to Assoc. Professor or Professor's cadre on the basis own performance and merits, and does not have to wait for any positions to fall vacant. This leads

to an intense motivation in them to prove themselves as excellent teachers and researchers. Not only this, a teacher gets feedback at the end of every semester from his / her students. The faculty of the Institute is encouraged to undertake sponsored research and industrial consultancy. The number of projects and value of projects in terms of funds received are amongst the best in the whole IIT system. The Institute always looks forward to a healthy and productive interaction with the industry.

There are 10 hostels for boys, 3 for girls and about 400 flats for married students. Our hostels have more than adequate capacity. With all modesty, I can say that they are amongst the best student hostels in the country. A multi-activity centre for students has been added at Saharanpur Campus recently. Construction of another large multi-activity centre has been started in Roorkee Campus. It will have an auditorium of 500 capacity, food courts, shopping complex, Bank counter, ATMs and Post-office etc., all in one place.

Our Library, known as Mahatma Gandhi Central Library, is amongst the best libraries in the country. It has a totally air-conditioned space of about 1 lakh square feet. It has got a huge collection of more than 3.7 lakh printed volumes of books, journals and periodicals. The Library also has more than 25,000 e-Books and 12,000 online e-journals to support the work of research students and faculty. For browsing these electronic resources, more than 40 latest Apple-Mac computers are available in the library for students. The Library building is completely wi-fi enabled. The students are allowed to bring their laptops and use them inside the library. All electronic resources are available through Institute Intranet (or LAN) and are accessible from students' hostels and departments as well. Recently, the library has installed RFID system, whereby the students will be able to borrow and return their books themselves.

The Information Superhighway Centre (ISC) takes care of maintaining the Institute LAN. It provides internet, intranet, centralized anti-virus solution, Institute website, and e-mail facility to all students, faculty and staff through [iitr.ernet.in](http://iitr.ernet.in) domain. The Intranet and Institute website are managed by a student group, called Information Management Group. The Group includes students from all disciplines, and provides them with ample opportunities to both learn and earn.

The overall Internet bandwidth available to the institute users is more than 1100 Mbps. Saharnapur campus is connected to the main campus through a 34 Mbps leased line. All hostels have Cyber-cafes where about 20 systems are provided for Internet & Intranet access. Existing hostels have wireless Internet access from each room. In the newly constructed hostels, wired connection to each room has been or is being provided. Besides, three virtual class-rooms are being developed under the MHRD mission project, called National Knowledge Network, and are expected to be functional by September 2011.

The Institute Computer Centre (ICC) is a central facility that provides computing resources – both hardware and software – to students and faculty. As a policy, various Engineering and Scientific software used by more than one department, such as MatLab, GIS, Ansys, Abaqus, Pro-Engineer, Sarscape, Acrobat are deployed centrally in Computer Centre and made available to all the users through network-based floating licensing.

Students are encouraged to participate in various sports and cultural activities with the aim of a holistic personality development. IIT Roorkee has got one of the best facilities for sports. I am proud to tell you that this year the girls' team of IIT Roorkee won general championship during Inter-IIT Sports Meet at Delhi. The boys' team secured overall second position in the same competition. We have Olympic-size swimming pool, which was constructed in 1957 by **Shramdan** of students and faculty. The Campus hums with diverse recreational and creative activities. The Hobbies Club, Boat Club and Himalayan Explorer Club are unique facilities available at IIT Roorkee. All undergraduate, postgraduate and Ph.D. students reside on the campus and thereby get full opportunity to participate in co-curricular and extra-curricular activities. With all the faculty members also residing on the campus, there is a unique, close and family – like relationship between students and teachers. A fairly equipped Institute Hospital caters to the health needs of the campus community.

The Training and Placement Cell helps the students in arranging internships and placement through on-campus recruitment. During the academic year 2010-11, 97% of registered UG students, 89% of registered IDD students and 74% of registered PG students got job offers through on-campus recruitment. The maximum packages for these categories of students were Rs. 28.5 lakh, 20 lakh and 28.5 lakh, respectively, and the average packages were 6.82 lakh, 8.12 lakh and 5.48 lakh, respectively. Many students do aspire to go for MS

or MBA programmes and do not appear for campus placement. Recently, there is an increasing trend for joining PSUs in core sectors.

Indian Institute of Technology Roorkee has MoU or International or National Collaboration with 57 world-class Universities and Research Organizations. These collaborations have been made with an overall objective to promote the research in various areas of science and technology. Through these collaborations students may visit partner institutions for various purposes such as summer training, project work, and semester exchange.

With 164 years of history in producing quality engineers, Roorkee has a rich Alumni base that has significantly contributed in the nation building process. The Alumni of the Institute have done exceedingly well in all spheres of life, both at national and international levels, and brought name and fame for themselves as well as to their Alma Mater. The Institute takes pride in their achievements. A portal called SAMPARK has been created on IIT Roorkee website as platform for information exchange among our Alumni and our students.

Every year the Institute publishes a booklet describing Ordinance and Regulations of Academic Programmes and the syllabi of 1<sup>st</sup> year courses and 2<sup>nd</sup> year Common Courses. This booklet alongwith the Academic Calendar for the whole semester have been given to you at the time of registration on 17<sup>th</sup> July, 2011. They are available on the Institute's website also. The booklet contains lot of information on academic programmes and regulations (for example, academic and subject registration, maximum and minimum number of course credits, adding and dropping of courses, evaluation and grading system, attendance requirements, leaves, scholarships, punishment for use of unfair means, etc.). You are strongly advised to go through these ordinances and regulations very carefully in your own interest.

Discipline has been the hall-mark of this institution since inception. Errors and mistakes could be corrected, or even ignored. But indiscipline is neither acceptable nor pardonable. We are also strict about attendance in the class. Please also dress yourselves decently and behave nicely. Much before the Honourable Supreme Court made ragging a

cognizable offence, we had been dealing strongly with this menace. All possible measures have been taken and shall remain in force to prevent even slightest of ragging. But you have to cooperate with us by following the instructions of the Dean of Students Welfare. Keep your I-Card and phone numbers of the officers concerned with you all the time. Be careful if you are going out of the Campus. We do not have jurisdiction outside the campus and may not be able to protect you against anti-social elements there.

With this brief overview of the Institute and some words of advice, I once again welcome you, the newly admitted students, to the portals of this great educational institution, and wish you a memorable, meaningful and rewarding tenure. May you emerge as world-class engineers, architects or scientists. Prove yourselves as good human beings and worthy citizens of this great country, India. I also welcome your parents and guardians, who have come with you on this auspicious occasion of your life, to go around the beautiful and sprawling campuses at Roorkee and Saharanpur.

Thank you all. Good luck and happy time to the young friends. **Jai Hind !**

**Dr.H.K.Verma**  
**Director**  
**Indian Institute of Technology Roorkee**  
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