



# National Institute of Technology Rourkela

## Admission To Ph.D / M.Tech.(Research) Programmes

### Starting Spring Semester (January), 2012.

Applications are invited **online** from eligible candidates for admission to Ph.D. and M.Tech. (Research) Programmes of the Institute with or without fellowship for Spring Semester 2011-12.

Departments	Programmes being Offered in Spring 2011-12
Biotechnology and Medical Engineering	Ph.D only
Ceramic Engineering	Ph.D & M.Tech (Research)
Chemical Engineering	Ph.D & M.Tech (Research)
Civil Engineering	Ph.D & M.Tech (Research)
Computer Science & Engineering	Ph.D & M.Tech (Research)
Electrical Engineering	Ph.D & M.Tech (Research)
Electronics & Communication Engineering (Including Instrumentation Engineering)	Ph.D only
Industrial Design	Ph.D only
Mechanical Engineering	Ph.D & M.Tech (Research)
Metallurgical & Materials Engineering	Ph.D & M.Tech (Research)
Mining Engineering	Ph.D & M.Tech (Research)
School of Management	Ph.D only
Chemistry	Ph.D only
Life Science	Ph.D only
Mathematics	Ph.D only
Physics	Ph.D only
Humanities & Social Sciences (English, Psychology, Economics & Sociology)	Ph.D & M.Tech (Research)

### Eligibility Criteria for Ph.D. Programme:

The minimum qualification required for admission to Ph.D. programme in Engineering, Science, Management, Humanities & Social Sciences is one of the following:

- M.E./M.Tech./M.Pharm in relevant discipline with at least 6.5 CGPA or 60 percent marks in aggregate in both B.Tech. (Or M.Sc./M.Pharm/MCA) and M.Tech. Levels from a recognized technical Institute or University.
- B.E./B.Tech./B.Pharm/MCA or equivalent in relevant discipline with CGPA of 7.0 or 65 percent marks in aggregate.
- M.Sc. in Basic Sciences with CGPA 7.0 or 65 percent marks in aggregate in relevant disciplines.
- M.B.B.S. with CGPA 6.5 or 60 percent marks in aggregate.
- M. Sc. /M.A. / MBA / M.Com. in Humanities or Social Sciences or Management with CGPA 6.5 or 60 percent marks.

## **Eligibility Criteria for M.Tech (Research) Programme:**

The minimum qualification required for admission to M.Tech (Research) programme in Engineering, Science, Management, Humanities & Social Science is one of the following:

- a) B.E./B.Tech./B.Pharm/MCA or equivalent in relevant discipline with 60 percent marks in aggregate (or 6.5 CGPA).
- b) M.Sc. in Basic Sciences with 60 percent marks in aggregate (or 6.5 CGPA) in relevant disciplines.
- c) M.B.B.S. with 60 percent marks in aggregate (or 6.5 CGPA).
- d) M. Sc. /M.A. / MBA / M.Com. in Humanities, Social Sciences or Management with 60 per cent marks or 6.5 CGPA.

## **Applicants Awaiting Results**

Applicants who have fully completed the final examination and are awaiting results are also eligible to apply for both M.Tech(Res) and PhD programmes. The following conditions apply:

1. For all course based degrees [B.Tech, M.Sc., MBA, M.Tech (Regular)] results need to have been published before admission is granted.
2. For thesis based Postgraduate degrees [M.Tech (by Research), MS or equivalent] a student given admission to the PhD programme is permitted one year from the date of his/her thesis submission (proof required) to submit successful result. During this period students awarded fellowship will be paid fellowship at B.Tech rate. Difference of fellowship will be paid on submission of results.

Differential academic qualifications across the departments have been made considering the departmental requirement, availability of candidates in the respective departments and uniform growth of all departments in the Institute.

<b>Qualifying Degrees for Admission to Ph.D. / M.Tech (Research) Programmes</b>	
<b>Department</b>	<b>Requisite Academic Qualification</b>
Biotechnology and Medical Engineering (BM)	M.Tech in Biotechnology/Biomedical Engg. / Chemical / Mechanical / Electrical / Electronics / Metallurgical / Polymer/ Instrumentation Engg with GATE qualification in the past / MBBS.
Civil Engineering (CE)	B.Tech. in Civil / Mining/Mechanical/Agricultural/Chemical Engineering or any relevant branch of Engineering.
Chemical Engineering (CH)	B. Tech. in Chemical / Bio Chemical / Biotechnology / Mining / Metallurgical & Materials Engg. / Mechanical / Ceramic Engineering or any relevant branch of Engineering.
Ceramic Engineering (CR)	B.Tech/M.Tech in Ceramic / Metallurgy / Chemical / Mechanical Engg./ Nanotechnology/Biomedical Engg. Or M.Sc in Physics / Chemistry / Materials Science/ Nano Science.
Computer Science & Engineering (CS)	B.Tech. in Computer Science & Engineering / Electronics / Electrical Engg. / IT, MCA or M.Sc. in Computer Science
Chemistry (CY)	M.Sc. in Chemistry, Physics, or B.Tech. in Chemical / Ceramic / Metallurgical and Materials Engg.
Electronics & Communication Engineering (EC)	B. Tech. in Electronics / Electrical Engg. /Biomedical Engg.

Electrical Engineering (EE)	For Ph.D, B.Tech. in Electrical / Electronics / Electrical & Electronics/ Electronics & Communication / Instrumentation Engg. For M.Tech ( Res ), specialization in Electrical Engg (Electrical Machines) only with good GATE Score.
Humanities and Social Sciences (HS)	M.Sc. / MA in relevant subjects, B.Tech. in any branch of Engineering, MBA.
Industrial Design (ID)	B.Des with any specialization <b>OR</b> B.E. / B.Tech in Mechanical Engineering/ Manufacturing Science/ Production/ Industrial Engineering/ Robotics/ Instrumentation/ Mechatronics/ Computer Integrated Manufacturing/ CAD/CAM.
Life Sciences (LS)	M.Sc. in Life Sciences/ Botany/ Zoology/ Microbiology/ Biotechnology/ Biochemistry/ Bioinformatics / MBBS/ BVSc.
Mechanical Engineering (ME)	B. Tech. in Mechanical / Automobile / Biomedical / Aeronautical / Production / Manufacturing / Industrial / Metallurgy or Material / Polymer / Chemical Engg/ Mechatronics.
Mathematics (MA)	M.Sc. in Mathematics/Statistics/Computer Science/Information Technology and MCA. However candidates with M.Sc. in Computer Science, Information Technology and MCA degree must have Mathematics Honors at B.Sc. Level.
Metallurgical & Materials Engineering (MM)	B.Tech. in Metallurgy / Met. and Mat. / Ceramic / Chemical / Mechanical / Production / Manufacturing Engg. or M.Sc. in Physics or Chemistry.
Mining Engineering (MN)	B.Tech. in Mining or in any other relevant branch of Engineering or M.Sc. in Geology / Geophysics / Physics / Chemistry.
School of Management (SM)	M.Tech/ B.Tech in any discipline/ M.Pharm/ MBA
Physics (PH)	M.Sc in Physics, Mathematics, Chemistry (With Mathematics as a subject in B.Sc), B.Tech in any branch.

**Notes:**

1. Students with B.Tech. background will be given preference over students with M.Sc. background, even with an M.Tech. Degree, for selection as Research Scholars in Engineering Disciplines.
2. Students with any other relevant background can be eligible with approval of Senate or Chairman, Senate on the recommendation of the DAC (PG & R).
3. Science students admitted to Ph.D. programme in Engineering need Mathematics in +3 level. Students without Mathematics in +3 level may be admitted under the condition that they will have to register for 16 credits of 100 and 200 level Mathematics & Computer Science courses (Theory and Practical) in addition to their normal course requirement, and secure at least C grade in each course.

**Notes:**

1. There is no relaxation in academic requirement for SC/ST/OBC/Handicapped students.
2. Students of one discipline may seek admission in a related department which will be considered on the basis of merit of the case. Selection will be made on the basis of academic record, relevance of qualification, **candidate's research interest**, existing research programmes and facilities of the departments, and performance in tests and/or interviews.

## **Financial support:**

Fellowships/Assistantships are available to meritorious Ph.D. and M.Tech (Res) students of all departments, the rate of which is given in the following table.

Sl. No.	Academic Programme	Qualification	Period	Rate of Fellowship/ Assistantship
1.	Ph.D.	M.Tech./M.Pharm/MBBS	1 <sup>st</sup> & 2 <sup>nd</sup> year	18,000/-
			3 <sup>rd</sup> & 4 <sup>th</sup> year	20,000/-
2.	Ph.D.	B.Tech./B.Pharm./M.Sc./MA/ MCA [With valid GATE/NET score only]	1 <sup>st</sup> & 2 <sup>nd</sup> year	16,000/-
			3 <sup>rd</sup> , 4 <sup>th</sup> & 5 <sup>th</sup> year	18,000/-
3.	M.Tech.(Res)	B.Tech./ B.Pharm./ MBA/ M.Sc./ MCA/ MBBS/M.Com./M.A.[With valid GATE/ NET score only]	2 years	8,000/-

Institute fellowships will not be awarded to candidates above 32 years of age for Ph.D. (35 years for SC/ST and women candidates) and above 28 for M.Tech (Res) (31 years for SC/ST and women candidates) on the date of interview. The restriction shall not apply to scholarships awarded by external agencies or sponsored projects.

A student receiving fellowship or other financial support is required to assist faculty members of department in teaching and research activity. He may be required to take theory, tutorial and laboratory classes, assist in student projects or other R & D activities as assigned by the HOD.

Financial support is initially for a period of one year. All financial support can be renewed on year to year basis on satisfactory performance.

## **Fees:**

Fees to be paid at the time of admission to PhD/M.Tech (Research) Programmes:

Sl.No.	Institute fees	Amount to be paid at the time of admission
1.	Admission fee (One time fee)	Rs. 1000/-
2.	Tuition fee	Rs. 2500/- [ Nil for SC/ST students]
3.	Student activity fee	Rs. 1000/-
4.	Hostel admission fee(One time)	Rs. 500/-
5.	Hostel Seat rent	Rs. 2500/-
6.	Medical fee	Rs. 750/-
7.	Caution Money(Refundable) (One time)	Rs. 5000/-
<b>TOTAL</b> ( to be paid through demand draft in favour of Director, NIT, Rourkela payable at any bank in Rourkela)		<b>Rs.13250/- (Rs.10750/- in case of SC/ST students)</b>
<b>Mess Advance</b> (Draft to be made in favour of "Chief Warden of Halls, NIT Rourkela" payable at any bank at Rourkela)		<b>Rs. 14500/-</b>
The above fee is only for the 1st semester. For remaining semesters the approximate fee will be Rs 21750/- (Rs 19250 /- for SC/ST students) which is inclusive of Mess dues.		

### **Refund Rule:**

- A. If a student is removed or he withdraws/leaves the Institute in the mid-session without completing the entire course, all fees paid including the caution deposit will be forfeited by the institute. Mess advance may be refunded after deduction of dues, if any.
- B. If a student withdraws from the institute within 30 days from his date of admission, on necessary approval of the withdrawal request, following deposits may be refundable after deduction of dues, if any:
  - 1) Caution money
  - 2) Mess Advance.
- C. If a student with fellowship (Institute or external) withdraws/leaves the Institute in the mid-session without completing the programme, the entire amount paid to him/her towards fellowship will be refundable by the student before leaving the Institute.

### **Sponsored/Local Sponsored candidates:**

The Institute welcomes candidates from reputed academic and R & D Institutions, as well as from Government organizations and Industry. Sponsored candidates can work full time in the Institute or at their place of work after satisfying residential requirements, if facilities exist. Local sponsored applicants (working in and around Rourkela having permanently non-transferable jobs) must have enough time and flexibility in their job assignment in order to continue the programme applied. Sponsored candidates must have completed at least two years of continuous service in the sponsoring organization, which must be an institution of repute employing good number of engineering/science professionals. The completion of two years continuous service shall be counted on July 31 and January 31 for Autumn and Spring semester admission respectively. Sponsored students are expected to serve their sponsoring organization on completion of their degree in NIT, for at least 3 years after completion of the academic programme.

### **Application Procedure:**

Interested candidates satisfying the eligibility criteria may submit **online application** following the instructions. **Applicants are advised to (a) use Internet Explorer browser version 6.0 or above, (b) read the advertisement carefully, (c) read the instructions to fill up the online application form (d) fill up and submit the online application form accordingly and (e) take the print out of the online application submitted with setting Paper size: A4, and margins as Left: 0.165, Right: 0.165, Top: 0.16 and Bottom: 0.165 inches.** Applicants are required to send the print out of the application submitted online attaching a non-refundable demand draft of **Rs.500/-** (Rupees five hundred) in favour of Director, National Institute of Technology, Rourkela, payable at any bank in Rourkela and appropriate Sponsorship Certificate (if applicable) and **no other documents** to "The Assistant Registrar (Academic), National Institute of Technology, Rourkela – 769 008 (Odisha)". The envelope containing application form should be super scribed by "Application for PhD/M.Tech(Research)". Application forms received after due date may not be considered.

**The results of scrutiny and selection will be displayed in the Institute website [www.nitrkl.ac.in](http://www.nitrkl.ac.in) as per the dates given below and no intimation will be sent to the candidates by post. The candidates are requested to visit Institute website accordingly:**

### **Important Dates for this advertisement:**

Sl No	Event	Date
1	Application form will be available in the Institute website for online submission	September 30, 2011 (Friday)
2	Closing date for online application	October 31, 2011 (Monday)
3	Last date for receipt of print out of online application form with a DD of Rs 500/-	October 31, 2011 (Monday)
4	Completion of scrutiny of applications by all departments	November 10, 2011 (Thursday)
5	Result of scrutiny in the website	November 21, 2011 (Monday)
6	Interview	December 13, 2011 (Thursday)
7	Result of Interview in the website	December 19, 2011 (Monday)
8	Admission	December 26, 2011 (Monday) to January 30, 2012 (Friday) (except Saturdays, Sundays and Holidays)
9	Semester Registration	January 02, 2012 (Monday)
10	Starting of Classes	January 03, 2012 (Tuesday)

For the departments with poor availability of research students, as well as in all other special cases, admission can be done throughout the year with the approval of the Director. Intending applicants may contact the Head of the Department or the proposed supervisor.

Applicants are required to visit the above webpage accordingly. Also they are advised to book ticket much prior to the date of interview and admission. In case they fail to qualify either in scrutiny or interview, they will cancel their ticket.

### **Location:**

NIT Rourkela is around 8 kms away from the railway station. Applicants may hire an auto and reach the Institute. Present auto fare is minimum Rs 80/-.

### **Accommodation:**

NIT Rourkela is having Two Guest Houses (South Block and North Block) with limited number of rooms. Accommodation will be provided as per availability on payment basis. Interested applicants may contact in the following details for booking accommodation.

Contact Person: Mrs. Swagatika Sahoo  
Telephone: 0661-2462051, 2464000

### **For further details please contact:**

Dean (Ac), NIT Rourkela. Email: [dean-aa@nitrkl.ac.in](mailto:dean-aa@nitrkl.ac.in)  
Assistant Registrar (Ac), NIT Rourkela: Email: [ar-acad@nitrkl.ac.in](mailto:ar-acad@nitrkl.ac.in).

Sd/-  
**Assistant Registrar (Academic)**