राष्ट्रीय प्रौद्योगिकी संस्थान राउरकेला

National Institute of Technology Rourkela

No.NITR/AC/2013/L/457   **dated:27.01.2013**

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

Mid-Spring Semester (April), 2012-13.

A.   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 Mid-Spring Semester 2012-13.

Departments	Programme(s) being Offered
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 only
Electrical Engineering	Sponsored candidates only
Electronics & Communication Engineering	Sponsored candidates only
Industrial Design	Ph.D & M.Tech (Research)
Mechanical Engineering	Sponsored candidates only
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 & M.Tech (Research)
Humanities & Social Sciences (English, Psychology, Economics & Sociology)	Ph.D only

Sponsored candidates may apply for Ph.D. and M.Tech.(Res) programmes of any discipline.

B.

Eligibility Criteria for Ph.D. Programme:

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

   a) M.E./M.Tech./ in relevant discipline with at least 6.5 CGPA or 60 percent marks in aggregate in both B.Tech. (or M.Sc./ MCA) and M.Tech. levels from a recognized technical Institute or University.

   b) B.E./B.Tech./MCA or equivalent in relevant discipline with CGPA of 7.0 or 65 percent marks in aggregate.

   c) M.Sc. in Basic Sciences with CGPA 7.0 or 65 percent marks in aggregate in relevant disciplines.

   d) M.B.B.S. with CGPA 6.5 or 60 percent marks in aggregate.

Additionally candidates having the following qualification can also apply for Ph.D. in Management and Humanities & Social Sciences:

   e) M.A. / MBA / M.Com / M. Sc./B.Tech. with CGPA 6.5 or 60 percent marks.

Students without adequate background in the primary discipline will be required to have 10% extra marks (1.0 CGPA) to qualify over students with specialization in a primary discipline, unless explicitly exempted by the senate. List of primary disciplines for specializations under the various departments is given in Clause 'D' below:

C

Eligibility Criteria for M.Tech (Research) Programme:

The minimum qualification required for admission to M.Tech (Research) programme in Engineering, Science, Management, and 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.A. / MBA / M.Com. /M. Sc. in Humanities ,or Social Sciences or Management with 60 percent marks or 6.5 CGPA.

Applicants Awaiting Results

   1. For thesis based Postgraduate degrees [(M.Tech.(Research), MS or equivalent] a student is permitted to submit the final result within one year from the date of thesis submission. However, one documentary evidence (proof of thesis submission) from the candidate's Institute/University is required to be submitted at the time of admission.

   2. For all course based degrees [B.Tech, M.Sc., MBA, M.Tech (Regular)] results need to be produced at the time of Interview.

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.

D. Qualifying Degrees and Primary Disciplines for Admission to Ph.D/ M.Tech (Research) Programmes

The following are the minimum academic eligibility criteria to be eligible for applying to a programme. However, a higher short listing criteria (possibly different for different departments) may be set by the Department during scrutiny of applications depending on the departmental requirement, number and quality of applicants. In addition to the minimum eligibility criteria, following mandatory eligibility criteria will be used for shortlisting the candidates. Therefore, merely satisfying the minimum eligibility criteria does not guarantee to be called for interview and mere attending an interview does not guarantee a seat for admission.

1. **A candidate should score above 60% of marks or 6.5/10 CGPA at both Metric and +2 levels, or above 70% marks or 7.5/10 CGPA in one of these two Examinations to be eligible for admission to Ph.D. or M.Tech.(Res) programmes. Depending on the number of vacancies and no. of applications received, cut off marks in B.Tech./M.Sc or equivalent examinations may be set differently by different departments.**
2. **For admission to Engineering and Science disciplines (except Life Science), a candidate should have passed Mathematics in +2 Science.**
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.**

Department	Requisite Academic Qualification
Biotechnology and Medical Engineering (BM)	B.Tech (with GATE) and B.Pharm (with GPAT) OR M.Tech./ M.Pharm. (with B.Tech/B.Pharm)/M.B.B.S/MVSc.
Civil Engineering (CE)	B.Tech/M.Tech in Civil / Mining/Mechanical/Agricultural/Chemical Engineering or any relevant branch of Engineering.
Chemical Engineering (CH)	B. Tech/M.Tech in Chemical / Petrochemical/ Polymer/ Environmental / Metallurgical & Materials / Ceramic / Mechanical / Nanotechnology/ Biochemical / Biotechnology / Mining / any relevant branch of Engineering and Technology with Mathematics in +2 or M.Sc. in Chemistry/ Physics / Materials Science with Mathematics in +3 levels.
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/M.Tech in Computer Science & Engineering /Information Technology/ Electronics / Electrical Engg. Or MCA or M.Sc. in Computer Science/Information Technology
Chemistry (CY)	M.Sc. in Chemistry, Physics, or B.Tech/M.Tech in Chemical / Ceramic / Metallurgical and Materials Engg.
Electronics & Communication Engineering (EC)	B. Tech/M.Tech in Electronics / Electrical Engg. / Electronics & Communication Engineering / Electronics & Telecommunication Engineering / Electronics & Instrumentation Engineering / Applied Electronics & Instrumentation Engineering / Electrical and Electronics Engineering /Biomedical Engg.
Electrical Engineering (EE)	B.Tech/M.Tech in Electrical / Electronics / Electrical & Electronics/ Electronics & Communication / Instrumentation Engg./ Instrumentation & Control with good GATE Score if B.Tech
Humanities and Social Sciences (HS)	M.Sc. / MA in relevant subjects or B.Tech/M.Tech in any branch of Engineering or MBA.

Industrial Design (ID)	**Ph.D.:** M.Des with any specialisation or M.E/M.Tech in Mechanical Engineering/ Manufacturing Science/ Production/Industrial Engineering/Automobile Engineering/Instrumentation/Electrical and Electronics Engineering or M.E/M.Tech with specialisation in Robotics/Mechatronics/Computer Integrated Manufacturing/CAD-CAM **M.Tech.(Res):** B.E./B.Tech. in Mechanical Engineering/ Manufacturing Science/ Production/Industrial Design/ Industrial Engineering/ Electronics & Electrical/ Instrumentation/ Automobile Engineering.
Life Sciences (LS)	M.Sc. in Life Sciences/ Botany/ Zoology/ Microbiology/ Biotechnology/ Biochemistry/ Bioinformatics / MBBS/ BVSc./Bio-Physics /Food Science & Technology
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/MCA and First class Honours or equivalent in B.Sc. with Mathematics/Statistics as Honours subject.
Metallurgical & Materials Engineering (MM)	B.Tech/M.Tech in Metallurgy / Met. and Mat. / Ceramic / Chemical / Mechanical / Production / Manufacturing Engg. or M.Sc. in Physics or Chemistry /Materials Science
Mining Engineering (MN)	B.E/B.Tech/M.Tech in Mining/ Civil/ Environment/ Chemical/ Electronics/ Electrical/ Instrumentation/ Computer Science/ Mechanical/Metallurgical & Materials Engineering or MSc in Geology/ GeoPhysics/Environmental Science/Remote Sensing/ Mathematics/Statistics/Chemistry/Physics.
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. BE., B.Tech., AMIE and other recognized Membership Examinations (approved by Government of India) will be considered equivalent for the purpose of Ph.D. & M.Tech.(Res) admission.
2. For selection of Research scholars in Engineering disciplines, Students with B.Tech. degree will be given preference over students with M.Sc. degree, even if the latter has an M.Tech. Degree.
3. Students with any other relevant background may be eligible, but only with approval of Senate or Chairman, Senate on the recommendation of the Departmental Research Committee (DRC).

Notes:

1. *There is no relaxation in academic requirement for SC/ST/OBC/PH students, because the minimum academic requirements have been set to meet the basic challenges of the academic programme.*

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.*

E. **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	1st & 2nd year	Rs.18,000/-
			3rd & 4th year	Rs.20,000/-
2.	Ph.D.	B.Tech./B.Pharm./M.Sc./MA/M.Com/	1st & 2nd year	Rs.16,000/-

		MBA/ MCA/MBBS [With valid GATE/NET/GPAT score only]	3rd, 4th & 5th year	Rs.18,000/-
3.	M.Tech.(Res)	B.Tech./ B.Pharm./ MBA/ M.Sc./ MCA/ MBBS/M.Com./M.A.[With valid GATE/ NET/GPAT score only]	2 years	Rs.8,000/-

Apart from the above Institute fellowship, limited number of fellowships may also be available from the TEQIP fund. The decision regarding the number of such fellowships and eligibility criteria for the same will be taken after the admission is over.

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 for 4 years (with M.Tech/M.Pharm Degree) and 5 years for others

F.   **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.1500/-
2.	Tuition fee	Rs.2500/- [Nil for SC/ST students]
3.	Other fees (Exam., Library, Electrical etc.	Rs.3000/-
3.	Student activity fee	Rs.1500/-
5.	Hostel Seat rent	Rs.2500/-
6.	Medical fee	Rs.1000/-
7.	Caution Money(Refundable if programme completed) (One time)	Rs.5000/-
TOTAL (to be paid through demand draft in favour of Director, NIT, Rourkela payable at any bank in Rourkela)		Rs.**17,000/-**(Rs.**14500/- in case of SC/ST students)**
Mess Advance (Draft to be made in favour of "Chief Warden of Halls, NIT Rourkela" payable at any bank at Rourkela)		Rs.**17500/-**
The above fee is only for the 1st semester. For remaining semesters the approximate fee will be Rs.28,000/- per semester (Rs.25500 /- for SC/ST students) which is inclusive of Mess dues. However, the Institute reserves the right to amend the fee structure from time to time, which will be implemented with immediate effect for all students irrespective of the date of admission.		

Refund Rule:

A. If a student is removed or he withdraws/leaves the Institute in the mid-session without completing the entire programme, 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 with fellowship (Institute / QIP/ project / external) withdraws/leaves the Institute in the mid-session without completing the programme, the entire amount paid to him/her towards fellowship need to be returned by the student before leaving the Institute.*

G. *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 at their parent organization. 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 for. Their working hours to be suitably adjusted in the sponsored organization so that he/she can work on his/her studies at NIT Rourkela for at least 120 days and 500 hours per semester. 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 admissions 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.

H.   **Application Procedure:**

Interested candidates satisfying the eligibility criteria may submit **online application at http://application.nitrkl.ac.in** 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) pay application fee of Rs.500/- online from online application portal and (e) fill up and submit the online application form accordingly.** Sponsored candidates are required to submit the scan copy of the sponsorship certificate while submitting online application.

Applicants are **not** required to send hard copy of the application form or any other document to NIT Rourkela. However, candidates who will be called for interview will be required to submit signed copy of the application form, a set of Xerox copies of all certificates and original sponsorship certificate (for sponsored candidates only) at the time of interview. They also need to produce original certificates from HSC onwards for verification. The same will be forwarded to the Academic Office by the department for record.

I.   **Important Dates for this advertisement:**

Sl No	Event	Date
1	Application form will be available in the Institute website for online submission	January 30, 2013 (Wednesday)
2	Application to be scrutinized	Submitted online till February 17 (Sunday), 2013
3	Completion of scrutiny of applications by all departments	February 20, 2013 (Wednesday)
4	Result of scrutiny in the website	February 26, 2013 (Tuesday)
5	Interview	March 11, 2013 (Monday)
6	Result of Interview in the website	March 15, 2013 (Friday)
7	Admission	March 26, 2013 (Tuesday)
8	Semester Registration	On the date of admission
9	Starting of Class / Research work	From the date of admission
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 Institute website (www.nitrkl.ac.in) accordingly. They are also advised to book ticket in advance according to the interview and admission dates. In case they fail to qualify either in scrutiny or interview, they will cancel the ticket.

J. Location:

NIT Rourkela is around 8 kms away from the railway station. Applicants may hire an auto and reach the Institute. The usual rate of auto fare at present is Rs.90/-.

K. Accommodation for Interview:

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

Contact Person: Dr Samir Mohanty.

Telephone: 0661-2464000, 2464034

For further details please contact:

Assistant Registrar (AC), NIT Rourkela: Email: ar-acad@nitrkl.ac.in.

Sd/-
Assistant Registrar
(Academic, Research)