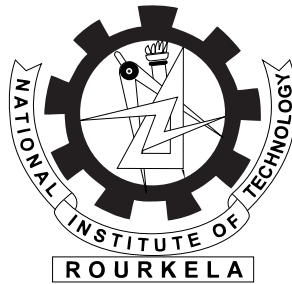**REGULATIONS**
FOR

M.Tech (R), Ph.D., D.Sc. Degrees, Research Associateship, Intellectual Property Policy

(EFFECTIVE FROM ACADEMIC SESSION 2007-08)

NATIONAL INSTITUTE OF TECHNOLOGY
ROURKELA

Every faculty, staff and student of NIT Rourkela is passionately committed to the mission of making India a world leader in technology and science, and nurtures this commitment with honesty, hard work and team spirit.

NATIONAL INSTITUTE OF TECHNOLOGY
ROURKELA

Message from the Director

For nearly half a century, our Institute has been counted among the leading technical institutes of the country. It has produced quality engineers for industry and Government, who have reached leadership positions in countless organizations. The industry of our country is undergoing a transformation. Design and R&D activities are gaining importance over manufacturing, marketing and management. This segment of the engineering process is boosting the demand for superior science and engineering professionals with postgraduate qualifications. Our institute has responded to this national need by augmenting our postgraduate and research programme, opening new courses and strengthening existing courses. This changed environment is attracting some of the brightest students of the country to our Research programmes.

The faculty and staff of our Institute are continuously striving to guide these gifted individuals in their studies and to create an atmosphere that is conducive to scholastic thinking. That makes all of us a special class of professionals in the society. Our Institute has a dream, the dream of being a part of the mission to make India a world leader in technology and science. We can do it through hard work, honesty, perseverance and mutual cooperation.It is my honour and pride to hand over to you – the students, staff and faculty of NIT Rourkela this booklet containing the complete regulations of the M.Tech.(R), Ph.D., D.Sc, Research Associateship programmes and the Intellectual Property Policy. I hope, with a copy in the hand of every student and every teacher, there will be little chance of error or conflict.

There are universities and institutions that lay their primary emphasis on evaluation rather than on instruction. An open university or a professional society is essentially an examining entity that limits itself to checking a student's knowledge of the field before awarding a degree or certificate. In contrast, at NIT Rourkela, we exist for imparting instruction and for creating an environment that is conducive to learning by self-study or discussion with peers. Therefore, attendance in all classes is far more important for us than for many of your friends in other institutions. Whether you are a student or a teacher, never miss a class. That is the fundamental recipe for success. These regulations are very harsh with those who do not honour this basic foundation of our academic programme.

Continuous evaluation is another hallmark of our academic system. Your learning will be proper and your academic experience will be complete, only if you take the home assignments and class tests seriously. Needless to say, you will be fully prepared for the semester examinations without struggling during those last few days.

NIT Rourkela is an institute with a difference. Learning of professional subjects is the basic foundation of any engineering programme. We do that; but we also go far beyond, far in terms of the quality of our project work, in terms of entrepreneurship and in terms of our breadth of knowledge. We are correctly poised for creating technology rather than assimilating it, for creating intellectual property rather than simply using some one else's invention. Our Institute has adopted one of the best intellectual property policies of the country. Let us take advantage of it. Let each one of us try to work towards realization of a patentable technology; I am sure, some day soon we shall make an indelible mark in the technological history of mankind.

With my very best wishes,

Sunil Kr Sarangi

C O N T E N T S

REGULATIONS
FOR

M. TECH DEGREE BY RESEARCH IN ENGINEERING, SCIENCE
&
HUMANITIES AND SOCIAL SCIENCES

(EFFECTIVE FROM ACADEMIC SESSION 2007-08)

NATIONAL INSTITUTE OF TECHNOLOGY
ROURKELA

C O N T E N T S

1. Introduction

1.1. The Institute provides facilities for research leading to the Degree of Master of Technology by Research [M. Tech. (R)] in Engineering, Science, Humanities and Social Sciences in various disciplines as mentioned in Appendix—I.

1.2. The M. Tech. (R) thesis shall be the report of the research work characterized by either discovery of new facts, new interpretation of known facts and theories, an independent design or development, development of a new instrument or technology, an exhaustive study and criticism of published work, or any applied research work that can be exploited for creation of wealth or for human well being.

2. Eligibility

2.1. The minimum qualification required for admission to M. Tech. (R) programme in Engineering, Science or Social Science is one of the following:

2.1.1. B.E./B.Tech./B.Pharm/MCA or equivalent in relevant discipline with 60 percent marks in aggregate (or 6.5 CGPA).

2.1.2. M.Sc. in Basic Sciences with 60 percent marks in aggregate (or 6.5 CGPA) in relevant disciplines.

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

2.1.4. M. Sc. /M.A. / MBA / M.Com. in Humanities, Social Sciences or Management with 60 per cent marks or 6.5 CGPA.

2.2. In computing the percentage of marks (or CGPA), all papers of a B.Tech. or M.Sc. / M.A. programme will be considered both in numerator and denominator.

2.3. Universities some time record their own conversion of marks to grade or vice versa on their grade sheets. Under such circumstances NIT Rourkela will accept only the original mode of evaluation ignoring the conversion.

2.4. In exceptional cases, where the candidate has proven research experience, evidenced by published papers and/or unpublished documents, the Senate, or Chairman Senate on its behalf can relax the mark requirement by 5 percent (or 0.5 in CGPA). Copies of the documents considered for the purpose must be presented to the Senate.

A further concession of 5% in B.Tech/M.Sc. marks or 0.5 in CGPA may be given by the Senate to candidates sponsored by Government departments or autonomous bodies under the Government who have put in at least 5 years of service in a relevant assignment. Such candidates will be required to complete at least 8 credits of undergraduate courses with minimum B grade in each, in addition to the normal course requirements.

2.5. Students with degrees in one discipline of Science or Engineering can enroll for M. Tech. (R) in another discipline of Humanities, Science or Engineering, if such migration is considered relevant by the Departmental Academic Committee (PG & R). The Senate will announce, from time to time, a list of relevant departments and specializations for admission to M. Tech. (R) programme in each discipline. In all other cases, the decision must be made on case to case basis depending on the fields involved, proposed research programme and academic preparation of the candidate. A list of required specializations for various departments is given in Appendix – II. The constitution and functions of DAC (PG & R) are given in Appendix – VII.

2.6. Qualification in GATE or NET is not essential for admission to M. Tech. (R) programme. Students applying for Institute or Government scholarships / fellowships, however, shall need a valid NET (Lectureship or JRF) or GATE score, if required by the Government or Institute regulations.

2.7. The various categories of students (with or without financial support) mentioned below are eligible for admission to M. Tech. (R) and Ph.D. programmes provided they satisfy the qualification requirements as given in sections 2.1 & 2.2.

   1. Full time student with Institute Fellowship /Assistantship (Institute Scholar)

   2. Full time student with External Fellowship (UGC/CSIR etc.)

   3. Full time student without Fellowship (self financed/self supported)

4. NIT faculty (Ph.D. only)

5. NIT regular employees (Non teaching)

6. Project Scholars (JRF/SRF/RA etc.) or project staff members

7. QIP Scholars (Ph.D. only, until approval is received from AICTE)

8. Sponsored student (Institute/Research Organisation/Industry)

9. Sponsored student from Rourkela and vicinity [part time]

2.8 Unlike other academic programmes, mere possession of required degrees and a superior academic record do not guarantee admission to a student to the M. Tech. (R) programme. Apart from academic record, the DAC will take into consideration the research aptitude, subject interest, availability of supervisors, facilities in the department and the department's research focus while selecting candidates to the M. Tech. (R) programme.

3. Admission

3.1 All categories of candidates except the members of the Institute faculty, QIP scholars and scholars nominated by the Central Government have to be selected by Departmental Academic Committee (PG&R) on the basis of overall academic performance, written test and/or interview.

3.2 Candidates employed as SRFs/JRFs or as Full time Research engineers in sponsored projects may be admitted to the M. Tech (R) Programme under category 6. They need to obtain permission of the Principal Investigator and Dean (SRICCE) for admission. The project should have tenure of at least 12 months beyond the date of admission of the candidate to the M. Tech. (R) programme. They also have to satisfy the qualifying marks requirement and will undergo selection procedure like other students. On termination of the project, their status will be full time student without scholarship (Category 3), unless offered another type of scholarship. Students who have earned a GATE/NET score and have availed at least 12 months of fellowship under a project will get first priority in award of Institute fellowship, irrespective of number of fellowship holders under the same supervisor or in the same department, if Institute fellowship is available for the purpose.

3.3 Non-teaching staff of the Institute may be permitted to join the M. Tech. (R) programme under following terms and conditions:

(i) A member of non-teaching staff seeking permission to join the research programme must hold a permanent post in the Institute and must have a standing of at least 3 years service in the Institute in the same cadre.

(ii) The employee must be engaged in research as a part of his normal duty, so that his work output can qualify for the degree of M. Tech. (R). Study towards M. Tech. (R) cannot be done on a part time basis outside the working hours of the Institute.

(iii) The application for administrative permission to join a research programme by a member of non-teaching staff must be submitted to the Director through the Head of the Department/Centre or the section in-charge, as the case may be where the candidate is employed. While submitting the application he/she must give an undertaking to the effect that he/she will abide by all rules and regulations.

(iv) Administrative permission by the Director does not constitute academic approval of the Senate for admission.

(v) The application will be examined by the Departmental Academic Committee (PG & R) of the department where the candidate wants to be enrolled. The committee will interview the candidate to ascertain his suitability in the programme.

(vi) Regular Non teaching staff appointed in sponsored research projects for carrying out research work may be given leave without pay from the Institute to work in the project and pursue M. Tech. (R) programme at the same time. In deserving cases, Director, at his discretion, may approve payment of partial salary (up to 50%) and waive lien charges, against services rendered to the Institute.

(vii) Every application for admission under this category shall be examined by the Research Programme Evaluation Committee(RPEC) taking into account whether the proposal for joining the programme

for which permission is sought for arises out of genuine interest and ability, and whether the normal job assignment of the applicant sufficiently overlaps with the proposed research programme. Final permission will be accorded by the Senate.

(viii)   The members of the non-teaching staff applying for M. Tech. (R) programme must satisfy the minimum qualification requirement as mentioned in para 2.1 or 2.2.

3.4   Candidates sponsored by major public and private sector employers are given concessions in admission and subsequent requirements. The norms for admission of sponsored candidate are given in Appendix - X.

3.5   Students enrolled in the Ph.D. programme may shift to M.Tech.(Res) on recommendation of the Doctoral Scrutiny Committee and approval of the Senate. All such proposals will be examined by the RPEC before presentation to the Senate.

Similarly, in case of M. Tech. (Res.) students with superior performance in courses as well as in research, the M. S. C. may recommend conversion of the programme to Ph.D. The proposal will be examined by RPEC before being presented to the Senate. The student will be required to satisfy all requirements of Ph.D. degree before submitting the thesis for Ph.D.

3.6   Candidates desirous of pursuing M. Tech. (R) programme must apply in prescribed form (Form AC/301) to the Deputy/Assistant Registrar (Academic) either on their own or against an official advertisement. These applications will be scrutinized by the Departmental Academic Committee (Form AC/302) of the concerned department. The recommended candidates, on approval of Dean(AA), will be called for personal interview with the Departmental Academic Committee.

The Committee, through written or oral examination, or a combination of both components, shall ascertain suitability of the candidates to the M. Tech. (R) programme and give its recommendation to the Dean (AA) for approval (Form AC/303).

While selecting a candidate for studentship with or without scholarship, Departmental Academic Committee will consider not only the merit (career, depth and breadth of knowledge in chosen and allied fields) of the candidate, but also the research aptitude and ability to complete the programme. The Committee shall also ascertain that at least one faculty member of the Department is available and willing to supervise the candidate if selected in his/her chosen field. [The faculty member will not have the option to refuse, if the candidate opts to work under him after joining.] A candidate should not be selected if the Department does not have physical resources and supervising faculty to do justice to the candidate's academic interest.

If a candidate recommended for admission has a close relative serving in the Institute as an Officer or a member of the faculty, the application should be so identified and sent to Director for approval. The Director may, at his discretion, approve the recommendation or refer to a committee on conflict of interest.

3.7   The admission letter (Form AC/304) will be issued by the Deputy/Assistant Registrar (Academic) to a successful candidate on the basis of recommendation of the Department and approval of Dean (AA)/Director.

3.8   On joining the Institute, submitting the enrolment form (Form AC/305) duly forwarded by the Department and after paying the prescribed fees, the candidate will be assigned a Roll number by the Academic Section.

3.9   The Academic Section will allot the candidate to a hall of residence. Students not desirous of staying in a hall must seek permission from the Dean (AA) to stay outside. A student permitted to stay outside the halls shall be attached to a hall and will be required to pay appropriate seat rent and other hall fees.

3.10   Admission to the programme may be given at any time of the year. The fees, however will be for a full semester. Summer is included in the Spring semester.

4.   Supervisors

4.1   All candidates for M. Tech. (R) degree are required to carry out their research work under the guidance of ONE/ TWO supervisors, to be appointed by the Senate or Director/Dean(AA) on its behalf on recommendation of the Departmental Academic Committee (PG & R) and HOD. Ordinarily the DAC will recommend one Supervisor. However in case of inter-disciplinary research (within the same department, across two departments or across two Institutes) a second supervisor may be appointed.

4.2   When there are two supervisors, one of them will be called the Principal Supervisor. Ordinarily the Principal Supervisor will be a faculty member of the registering department. However in deserving cases the DAC (PG & R) may recommend a faculty member of another department of the Institute as Principal Supervisor.

4.3   (a)   The supervisor may be in the rank of Professor/Asst. Professor with or without Ph.D. degree or Lecturer with Ph.D. degree.

        (b)   A sponsored student desiring to work in his/her place of employment should have a supervisor from his/her organisation. The joint supervisor so proposed must have a Ph.D. Degree or at least 10 years of relevant professional experience. In case of Academic Institutes a Ph.D. Degree is necessary to become a joint supervisor. In deserving cases, the Senate may accept a supervisor from the sponsoring College/ University without a Ph.D. degree.

        (c)   In special cases, where persons of adequate academic standing are not available in the sponsoring organization, and adequate physical facilities are available to ensure frequent contact between the student and his/her supervisor at NIT, Rourkela, the Senate may accept only one supervisor, who is a faculty member of NIT. The student will then be enrolled under category 9. Such proposals should be specifically approved by the Senate.

        (d)   In special cases, if it is felt to be beneficial to the project because of special expertise, the second supervisor may be from another Institute, Industry or other organization. Such cases shall be approved by the Senate on the recommendation of the DAC (PG & R) and RPEC.

4.4   A teacher with less than 1 year service left before superannuation may not be recommended as sole supervisor or principal supervisor. After superannuation a teacher will continue to be the sole supervisor if the thesis is submitted within 6 months; if it takes more than 6 months a substitute supervisor has to be appointed by DAC(PG&R). If no faculty member is willing to take up the assignment, the Director, as Chairman, Senate, will appoint the supervisor in consultation with the HOD. This selection will be binding on the student and the supervisor.

4.5   After superannuation from service if a person joins the Institute on re-employment or as Emeritus Scientist or on some scheme of UGC/AICTE, he will continue to be the sole supervisor or as Joint supervisor as he was before superannuation.

4.6   Persons from outside the Institute joining as Chair Professors/Emeritus Scientists can be appointed as supervisors for new scholars only jointly with a regular teacher, but not as sole supervisors.

4.7   A substitute supervisor can be appointed by DAC(PG & R) if a sole supervisor leaves the Institute. If the sole supervisor proceeds on long leave for a period exceeding one year, the DAC (PG & R) shall appoint a second supervisor, who will serve as co-supervisor when the original supervisor returns.

4.8   During the course of a M. Tech. (R) programme, if the supervisor, the MSC, the HOD or the Departmental Academic Committee feels the necessity of a second supervisor, an appropriate proposal must be prepared and placed with full justification before the MSC. The recommendation of MSC will be further considered by the Departmental Academic Committee. If agreed by the DAC, the proposal may be placed to the Senate through the RPEC.

4.9   A student's preference of subject and supervisor must be taken into consideration by the HOD and DAC while assigning a supervisor to him. There should not be any undue restriction on faculty or students in choice of students or supervisors, particularly under categories not involving institute fellowship. The DAC should record the reasons for not honouring the request of a student. The DAC may, however restrict the number of Institute fellowships (including those from QIP and special projects) allocated to a supervisor or research group.

4.10   There shall be no limit on maximum number of research scholars a faculty member can guide. The department may, however, regulate the number of students with Institute fellowship (including QIP and other fellowships allotted to the Institute) that will be assigned to each faculty. For example, a faculty member can get a second student with Institute fellowship only when there is no other eligible and willing faculty member to accept a student in the same major area (specialization) within the department. Students with individual fellowship, project fellowship, without fellowship and those current Institute scholars who have completed three years after admission will not be counted for the purpose.

5. **Masters Scrutiny Committee (MSC)**

5.1   Decisions of MSC shall normally be arrived at by concensus among members. In case of serious disagreement among members, the Chairman of MSC shall record the different viewpoints and put up to Chairman Senate through Dean (AA) for a decision. The Chairman's decision shall be binding on all concerned. A Masters Scrutiny Committee shall be constituted by the Senate for each candidate admitted to the Research Programme leading to M. Tech. (R) degree on recommendation of the DAC(PG&R) of the Department.

It shall consist of the following members:

1.	Head of the Department (ex officio)*	–	Chairman
2.	Principal Supervisor	-	Convener
3.	Second Supervisor (if applicable)	-	Member
4.	One faculty member from the department where the candidate is enrolled to be nominated by DAC (PG&R)	-	Member
5.	One faculty member from the same or a related department nominated by DAC (PG & R)	-	Member
6.	One faculty member from another department to be nominated by Dean(AA).	-	Member

*If the Head of the Department is a supervisor, the Chairman of the MSC will be nominated by Dean(AA) as long as the supervisor serves as the HOD. Similarly, when a supervisor assumes charge of HOD, the Dean (AA) will nominate a senior Professor to serve as Chairman of MSC.

5.2   No teacher who is enrolled for any degree in the Institute or outside shall be a member of MSC till completion of his/her degree.

5.3   The composition of the MSC shall be proposed by the DAC (except for the member from outside the department) when a student joins the Department and the recommendation shall be sent to the academic section. The academic section shall obtain approval of Dean (AA) and bring out an office order stating the constitution of the MSC. The Committee will hold its first meeting immediately on formation to process the formalities of "Provisional Registration". This process will be completed within a month of a student joining.

5.4   The Principal Supervisor, acting as the convenor of the MSC, will normally organize the meetings of the MSC after obtaining suitable dates from the Chairman and the members. Ordinarily, MSCs should meet within two working days of initiating the process. In case of difficulties in finding time convenient to all, or when a MSC is unable to reach a consensus, the Dean (AA) may be approached by either the Chairman or the Convenor to organize the meeting for making appropriate recommendations to the Senate. The Dean (AA) may, at his discretion, nominate additional members with relevant expertise from the same or other departments to assist in the specific task.

5.5   The MSC shall always record its recommendations with appropriate reasoning and enclosures, and formal minutes should be drawn and signed during the meeting. There shall be no provision for delayed preparation of minutes nor for confirmation of minutes.

5.6   Decisions of MSC shall normally be arrived at by concensus among members. In case of serious disagreement among members, the Chairman of MSC shall record the different viewpoints and put up to Chairman Senate through Dean (AA) for a decision. The Chairman's decision shall be binding on all concerned.

6. **Enrolment and Provisional Registration**

6.1   On receiving a letter of admission, every student joining the M. Tech. (R) programme shall meet the Head of the Department and submit an application for enrolment in Form AC/305. The HOD will call the DAC (PG & R) and assign the student to one or two supervisor(s), and will recommend the structure of the MSC. The student will present the recommendation of the Department to the Academic Section who will permit him to pay the fees and assign a roll number. During this period, (not to exceed one week) the student will get free accommodation in the student hostel, but will pay for the meals.

6.2   All the candidates admitted to the M. Tech. (R) programme are required to enroll in the programme on payment of the prescribed fees as given in Appendix - V and to carry out research work under a supervisor (or two supervisors) as mentioned in Clause 4. The enrolment will be with effect from the date on which a student is assigned a roll number [Form AC/306].

6.3   Within two weeks of enrolment, the student shall submit an application [Form AC/307] for provisional registration, in consultation with the supervisor. The application shall contain details of a student's career and his broad area of research.

6.4   The Masters Scrutiny Committee will examine the application and recommend "Provisional Registration". The provisional registration will record the area of research and the course work assigned. The Academic Section will bring out an office order on Form AC/308. The process should normally be completed within one month of a student's joining the department.

6.5   The effective date of provisional registration shall normally be the date of admission. The MSC may extend the date if a student does not initiate his course or research work immediately on enrolment.

6.6   Unlike the Ph.D. programme, there is no provision of early submission or credit for past work in the M.Tech(Res) programme.

7.   Residential Requirement

Normally all candidates admitted to the M. Tech. (R) programme will be required to stay in the Institute till they complete all assigned work and submit thesis. However, for sponsored candidates, the MSC may recommend to reduce the minimum residential requirement to one semester or higher (for completing the course work and formulating the research problem). Normally residential requirement shall be six months for Central Government R&D organizations and major industry with established R&D facilities, and one year for colleges and similar organizations.

If a sponsored candidate intends to carry out a major part of his research work in his place of employment, he must convince the Departmental Academic Committee (PG&R) at the time of selection that adequate research facilities and research tradition exist in his institution. While taking the decision DAC (PG&R) will examine all the documents presented to it regarding adequacy of the R&D facilities available in the sponsoring organisation. These documents have to be furnished by the candidate during the time of interview. In general major Central Govt. (CSIR, DRDO, DAE, ISRO, CDAC etc.) labs, research organisations, industries (public or private) with established R&D facilities are taken as organisations with adequate facilities. Regarding recognition of other organisations the DAC (PG&R) has to make a recommendation on the basis of the material available to it to the Director/Dean (AA) for approval. In every case, the Senate will decide the residential requirement.

Candidates employed in teaching or R&D Institutions within or in the vicinity the city of Rourkela and permitted by the employer to spend sufficient time on research at NIT may be exempted from the compulsory residential requirement. In special cases, the Senate may extend the same facilities to employees of industry engaged in R&D or related (e.g. management) activities. In all cases of Category-9 students, the duration of the programme shall be at least 3 years.

8.   Attendance and Leave

8.1   A research student, except when granted withdrawal by the Institute must attend to his work on a whole time basis. The department will maintain attendance record of the student, irrespective of whether the student is getting a scholarship or not. The DSC will examine the attendance record of students, and if it is found unsatisfactory, will recommend extension of minimum duration for submission of thesis, deregistration or termination of studentship, as it thinks fit.

8.2   A teacher of a course may debar a student from appearing in examination on ground of unsatisfactory attendance.

8.3   The working hours of Ph.D. and M.Tech(R) students is generally permitted to be flexible, but not lower than that of a full time employee. It is the supervisor's legal and moral responsibility to ensure that proper work environment is made available to the student. The students are encouraged to discuss such issues with their supervisors, with HOD and higher authorities.

8.4   A research scholar other than Institute staff is eligible for following leave per academic year to be permitted by the Head of the Dept. on recommendation of the supervisor (s).

i) For incidental purposes, CASUAL LEAVE – 15 working days.

ii) For treatment on illness, MEDICAL LEAVE – 15 days (including intervening holidays).

Dean (AA) may sanction casual leave and medical leave upto 15 additional days each in deserving cases. Leave beyond 15 days CL and 15 days ML will be without fellowship. Director may approve leave beyond this period, the excess leave being without fellowship and the minimum period of stay being extended accordingly. Leave for coursework will be governed by relevant M.Tech regulations.

If a student falls ill outside the Institute (only if he is out on approved leave or deputation), the Medical Certificates must be seconded by an Institute Medical Officer. The student must prove the genuineness of the illness by submitting medical attendance slips, referrals, diagnostic reports, medicine purchase receipts and all other medical papers in original before the Institute medical officer and/or Dean(AA) / Director.

There is no summer or winter vacation for research students.

In matter of course work, leave rules applicable to M. Tech. courses will also be applicable to Ph. D. and M. Tech. (R) students.

A student may be granted mess rebate for authorized absence (on leave or travel on duty) of 5 days or more, provided the hall office/caterer is informed in advance.

Forms NITR/AC/110 and AC/111 may be used by students while applying for leave of absence from course or research work on leave, academic or student activity.

9.   Semester Registration

9.1   A student enrolled in the M. Tech. (R) programme will be required to register every semester using Form AC/311 by paying Institute dues and other fees. [The semester registration is to be distinguished from Academic Registration, discussed in Section 11]. A full time student must be registered for 26 credits of academic load including courses and research credits. Part time students, including those who have taken withdrawal from the Institute and students of Category-9 can be registered for no more than 18 credits, including Seminar and Technical Writing and comprehensive viva voce.

9.2   Students who have been sanctioned withdrawal also need to do semester registration. They may, however, be permitted, in alternative semesters, to send registration form by post to their supervisors, who will present them to the Academic Section through the HOD. Thus a student taking withdrawal must register in person at least once every academic year.

9.3   Failure to do semester registration for two consecutive semesters will result in termination of studentship, which can be restored by the Senate on consideration of all circumstances, payment of arrear fees and extension of thesis submission date.

9.4   It shall be the responsibility of the student to bring any deviation in his status in matters of course of work, registration, withdrawal etc. to the attention of Dean (AA) at the time of semester registration, if he has not done so earlier.

9.5   A student may be exempted from semester registration by Dean (AA)/Director if he submits thesis within 30 days of scheduled semester registration. If he fails to submit thesis within 30 days, he must do semester registration before the thesis is accepted for evaluation.

10.   Course Work and Academic Credits

10.1   Every full time student of M. Tech. (R) programme must be registered for 26 credits of academic load per semester. The credit load will contain some regular courses and a two-credit course on "Seminar and Technical Writing", the balance being research credits. A student must acquire at least 104 credits including research credits registered for during the semester of thesis submission before being awarded the M. Tech. (R) degree.

10.2   A part time student may register for less credits depending on his involvement in other activities. While students engaged in full time research in R&D institutions whose job assignments match exactly with his thesis work may register for 24 credits of research per semester, others including college teachers and industry personnel may

take maximum 16 credits of research load. The 2 credit course on "Seminar and Technical Writing" in addition to research credits is compulsory for all students in every semester. The grades in Research course shall be awarded by the Principal Supervisor in consultation with the co-supervisor, if any.

The grades in the Seminar & Technical writing will be awarded to a student by the course teacher on the basis of participation in seminars presented by the fellow students and invited speakers, as well as on the quality of his own presentation in seminars and poster presentation.

10.3   In the final semester, a student should register for 4 credits of comprehensive viva voce in addition to research credits and seminar course.

10.4   In order to qualify for the degree a student is required to complete the following curricular requirements:

Part – A : Day to day work	
(a) Course work	12 credits
(b) Seminar & Technical Writing	8 credits
(c) Comprehensive Viva-voce	4 credits
(d) Registration Seminar	2 credits
(e) Synopsis Seminar	2 credits
(f) Research	84 credits
Sub total	**112 credits**
Part – B : Dissertation	
(a) Internal Evaluation of dissertation (by Supervisors)	8 credits
(b) Evaluation of dissertation by experts from institute	16 credits
(c) Evaluation of dissertation by external expert	16 credits
(d) Final Viva-voce by MSC, internal experts and supervisors (In special cases, at the discretion of the Chairman of the Senate, an external expert may be co-opted)	8 credits
Sub total	**48 credits**
Part – A & Part – B Total	**160 credits**

A student with B.Tech. degree registering in another discipline of engineering or science or a student with M.Sc./MBBS/MBA/MCA/B.Pharm degree registering any discipline of engineering has to successfully complete additional B.Tech./M.Sc. course credits of at least 08. Depending on the subject area, additional course work may be recommended by the MSC as deemed fit.

10.5   The coursework may be chosen from the existing PG (M.Tech.) programmes of the registering Dept. or from those of other departments. If a student joins the M. Tech. (R) programme in the middle of a semester, he must take courses in the following semester. Delay of maximum 10 working days can be condoned in joining a course. If a student needing course work does not get two full semesters to complete the courses, he may take one or more semesters to complete the courses.

10.6   The specific subjects of study will be decided by the MSC on recommendation of the supervisor(s). When a student joins at the beginning of a semester, he may be advised by his supervisor (s) to attend classes of recommended courses even before the provisional registration process is officially complete. In case the courses approved by the Senate are different from the courses being taken by the student, the student may at his choice discontinue or complete the courses recommended by the supervisor(s).

10.7   If recommended courses are not offered by the departments, the MSC can propose amendment of the list up to 02 courses (maximum) at the request of the supervisor(s). The change, if approved by Dean (AA), will be reported to Senate in its next meeting. Such amendment must be requested at least two weeks prior to the starting of a semester.

10.8 The candidate has to obtain an average grade point of not less than 7.5 in course credits and 8.00 in research and other credits with individual grade not less than C in each subject in the seven scale grading system. A course can be repeated to improve the grade if necessary.

Research credits lower than C will be ignored in calculation of credits completed.

10.9 In addition to courses of the M.Tech programme, a Department may offer special courses for M. Tech. (R) and Ph.D. students during the semesters or during summer vacation. If a course is offered in summer vacation, the total number of contact hours and the pattern of examination shall be the same as other courses taught during the normal semesters.

10.10 There is no provision for "guided self study" or "courses taken in other universities" under the M.Tech (R) programme. Institute employees including persons employed in sponsored projects may enroll in courses of their choice before enrolment in M.Tech(R) or Ph.D. programme under intimation to the Academic Section. When they join a Ph.D. or M.Tech(R) programme, the course and the credit earned may be counted towards course requirement at the discretion of the M.S.C. or D.S.C.

10.11 All M.Tech (R) students must register for the two-credit course named "Seminar and Technical Writing" in every semester. Resident students will satisfy the course requirement by attending Institute and Departmental Seminars, presenting seminars and poster presentations to departmental audience and submitting technical writings on assigned topics. Non-resident students will submit equivalent amount of technical writing and reports on seminars attended at their own places of work. If a student does not accumulate the required credits with at least C grade, he will not be permitted to submit his thesis. In special cases, if a student is ready with his thesis but has not cleared the required credits, the Director may, at his discretion, give him special assignments and appoint an examiner to evaluate the output.

10.12 The Seminar: The two seminars, each of about 45 minutes duration and each carrying two credits, should be so programmed that one is delivered at the completion of the course work (Registration) and the other at the time of submission of synopsis. The topic of the seminar shall be related to the area of his research work. Performance of students at the seminar will be assessed by the Masters Scrutiny Committee.

10.13 The comprehensive Viva-voce : The oral examination carrying four credits which will be conducted by the Masters Scrutiny Committee, will cover the course work completed by the student. This should be held preferably within one month of completion of course work, before the registration seminar.

10.14 Ph.D. and M.Tech(R) students enrolled in PG and UG courses are subject to the same regulations as applicable to other students in the courses with regard to attendance, discipline, assessment and grading.

11. Registration for M.Tech (R) degree

11.1 Each candidate enrolled for the M. Tech. (R) degree is given provisional registration on applying in prescribed form(See Section 6). This application shall be considered by the MSC in its first meeting, which will be held within one month of a student's date of admission. The MSC, on suggestions of the supervisor(s), shall recommend:

a) the area of research,

b) the course work to be carried out by the student.

The application for provisional registration will be sent by the HOD to Dean(AA) for placing before the Senate through RPEC.

11.2 An M.Tech (R) student, provisionally registered, will be formally registered for the degree of M. Tech. (R) on completion of certain steps. The registration can be done only after (a) the candidate has successfully completed all assigned course work (See Section 10), (b) worked out a road map of his Masters programme (c) successfully cleared the comprehensive viva-voce and (d) delivered an open seminar.

On completion of the course work (if any) a student will appear in a comprehensive oral examination to assess his depth and breadth of knowledge in the intended field of specialisation. The Masters Scrutiny Committee will become the examination board. One additional member may be inducted by the H.O.D. from the department or outside with specialization close to the area of research.

After satisfactory clearance of this examination, the student has to present his progress and plan of work to all members of the MSC in the form of a written document [Approximately 5 pages]. After a few days of handing over the report, the Department shall arrange a seminar by the student in the presence of the MSC. It should be an open seminar in the department, with invitation extended to students and faculty of all departments.

The written document and the seminar should outline the planned research work and identify the milestones. Both excessive vagueness, as well as exact description of the work to be done are discouraged at this stage to facilitate focused research work without being constrained. The broad objective stated in provisional registration order may be further focused at the time of registration.

Normally this should be done after elapse of 6 - 9 months from date of admission, but not later than 12 months. When a student fails to clear the course work within 12 months, or his seminar performance is unsatisfactory, he may be re-evaluated after a lapse of 3 months or more. If he cannot clear the course work and seminar within 2 years from the date of admission, he will be required to leave the M. Tech. (R) programme. In special cases with mitigating circumstances, the Senate can grant extra time without scholarship.

The MSC will recommend the effective date of registration depending on the progress of the student, but not prior to the effective date of provisional registration. If found unsatisfactory, the presentation can be given after 3 months, in which case the effective date of registration also shifts. The effective date of registration cannot be earlier to the date of seminar by more than one year except when the course work has taken 3 or more semesters. In such cases the effective date can be up to 18 months prior to the date of the seminar, but not before the date of enrolment.

11.3   The Head of the Department will send the application for registration [Form AC/309] to Dean(AA) along with a copy of the student's written report and recommendation of the MSC. The matter will be placed before the Senate through RPEC for approval.

11.4   The Academic Section shall bring out an office order [Form AC/310] confirming the registration after it is passed by the Senate.

11.5   At the end of every semester, the Academic section will issue an unsigned "grade card" on Form AC/325 listing all the courses and the grades obtained including research credits and Seminar and Technical Writing courses. At the end of the academic programme, a signed grade sheet will be issued by the Academic Section. A signed grade card may also be issued on a student's request and payment of prescribed fees after completion of 3 semesters.

12.   Fellowship

An M.Tech (R) student may be self-financed or can get a scholarship. In case of students awarded a scholarship by an external agency or from a research project operating in the Institute, the rules shall be governed by the provisions specified by the sponsor. Institute fellowships shall be governed by the rules of Institute.

Institute fellowships, if any, may not be awarded to candidates above 28 years of age [31 years for SC/ST and women candidates] on the date of selection. The restriction shall not apply to scholarships awarded by external agencies or sponsored projects.

13.   Withdrawal

A student, pursuing the M. Tech. (R) programme by staying on campus, can become non-resident by taking withdrawal from the programme. Such withdrawal can be granted on one of the following grounds :

(a)   When a sponsored student wishes to return to his place of work on completion of at least one semester of residence requirement, provided that such a scenario was mentioned in his application for admission.

(b)   When, on the certification by the supervisors, the MSC is satisfied that most of the experimental/computational work has been completed, and that the student can finish the rest of the project from outside. In this case the student shall submit a long report for scrutiny by the MSC along with the application.

(c)   When a regular student returns to his original place of employment or secures new employment, and the M.S.C. is satisfied that adequate facility exists in his place of work to carry out the project. The employer's sponsorship and a second supervisor must be ensured before such requests are considered by the MSC.

(d)   When a student, for personal or financial reasons, intends to take a temporary break and return to the Institute for completion of the work, or

(e)   Any other circumstances, which in the opinion of the Senate, justifies withdrawal.

For withdrawal under clause (b) or (c) above, a student should have completed at least 3 semesters of study in the Institute. In cases of submission of thesis from outside under provision (a), the minimum period of work shall be 5 semesters including the period spent in the Institute.*/

The following rules shall govern the withdrawal process:

(a)   The student shall do semester registration regularly, personally visiting the Institute at least once a year.

(b)   He shall pay all applicable fees every semester.

(c)   He completes the programme within the stipulated period (4 years) including the withdrawal period.

(d)   He will be entitled to a room in the hostel with all related facilities during his visits to the Institute, at approved rates of seat rent for short stay.

(e)   After withdrawal, a student may register for a maximum 16 credits of Research per semester plus two credits of Seminar and Technical Writing. When his job assignment matches exactly with his thesis work, the Director or Dean(AA) may permit him to register for 24 + 2 credits.

A student must apply to Dean (AA) through his supervisor(s) and HOD for withdrawal in prescribed form [Form AC/204] along with a report on the work done so far and plan of activities in future. The Supervisor will state the status of the project and the M.S.C. will examine the proposal. Withdrawal can be granted provisionally by Director if satisfied, and be presented to Senate for final approval. The Assistant / Deputy Registrar (Acad) will issue an withdrawal order on Form AC/205.

14.   Submission of Thesis

14.1   A candidate for the M.Tech (R) degree can submit his thesis after elapse of at least 2 years from the effective date of registration. The maximum period for submission of thesis is 4 years from the effective date of registration for all candidates. In all cases, the Masters Scrutiny Committee must be satisfied that adequate work has been done by the candidate.

Prior to submission, the candidate will submit the synopsis of the thesis [typically 10 pages including tables, graphs and references] and present a seminar to an open audience, which will include members of MSC. Copies of the synopsis should be handed over to the members of the MSC well before the date of the seminar. If the MSC is satisfied with the extent of work done, the candidate will be allowed to submit the thesis. The MSC should confirm that the student has earned the required number of course and research credits including the courses registered for in current semester and has cleared two credits of Seminar and Technical Writing per semester. If the MSC is not satisfied with the progress of work, the candidate has to appear again after a lapse of 3 months or more.

If the MSC feels appropriate, it may, at its discretion examine the full draft thesis before a student is permitted to submit it for evaluation. The thesis must be submitted within 2 months after the MSC approves the synopsis. Extension of the period beyond 4 years from the date of registration is not permitted. A student will be required to apply for fresh registration.

14.2   A candidate shall submit four copies of the thesis in case of single supervisor and five copies in case of two supervisors, neatly typed or printed and bound in a manner notified separately. The thesis must contain, besides the text and common matters like bibliography/references and summary/conclusions:

(a)   A certificate from the supervisor(s) that (a) the work has been carried out under his/their supervision, (b) the candidate has fulfilled all prescribed requirements and (c) the thesis which is based on candidate's own work has not been submitted elsewhere for a degree or diploma.

(b)   An abstract of the thesis (about 500 words) with key words (Maximum 20).

(c)   A preface/introduction in which the candidates shall state whether the thesis is based on discovery of new facts or new interpretation of established facts, or based on exhaustive study and critical analysis of published work of others, or design, or development work undertaken or applied research work.

(d)   Bio-data of the candidate within one page (i.e. name, date of birth, educational qualification, research experience, professional experience, if any, and permanent home address).

The candidate will also submit two copies of the thesis in electronic form and permit the Institute to use it in any manner that the Institute thinks fit. For the present, the electronic text should be submitted as two folders: one containing MS-WORD files and another PDF files. On completion of oral examination, a fresh CD may be submitted if any changes are made. One printed copy and one electronic copy shall be archived in Institute's Central Library, while another set shall be kept in the Department.

14.3   Format of submitting of thesis should be uniform across all departments. Students are expected to use only S.I. units in reporting of all experimental and computational data, and to maintain appropriate number of significant figures.

15.   Evaluation of Thesis

15.1   The MSC will suggest [Form AC/317] a list of 8 examiners (three from within the Institute and five from outside). After successful completion of the synopsis seminar by the candidate the examiners' list along with a copy of the synopsis will be placed to the Chairman, Senate to select the External Examiners under both categories in order of preference. The Chairman, Senate may add any name to or delete any name from the list suggested by MSC. The supervisor(s) will also serve as examiner(s) in addition to the two external examiners.

15.2   The Dean (AA) will send a formal letter to the examiners along with a copy of the synopsis requesting for acceptance of Examinership. After receiving the consent, the thesis will be mailed along with proforma of Examiner's report. In case of refusal, the second examiner in order as ticked by the Chairman Senate will be contacted and so on. If in this process, the list is exhausted, the Dean (AA) may ask the MSC to submit another list. The internal examiners (supervisors) will also be sent copies of the thesis along with the proforma of examiner's report.

15.3   The reports of the examiners shall be summarised by Dean (AA) and placed before the Director. After obtaining Director's approval, the reports are forwarded to the MSC. There may be four possible situations arising out of the nature of the reports. The steps to be taken, appropriate to the circumstances, are laid down below:

(i)   The examiners are unanimous in recommending the award of the degree without any modification of the thesis. This is a clear case for going for the final requirement of viva- voce.

(ii)   The examiners are unanimous in recommending the award of the degree but at least one of the examiners has suggested modification and/or has asked for clarifications. The candidate in that case shall make modifications and provide the clarifications as suggested within a time to be fixed by the MSC. These may be sent to the examiners, if so desired by them.

(iii)   One of the examiners does not recommend the award of the degree and rejects the thesis whereas the other external examiner recommends the award. The MSC in such a case may either ask the candidate to modify the thesis as suggested within a given time not exceeding six months and send the modified thesis to the same examiner again, or, recommend to the Chairman, Senate the appointment of another external examiner and send the thesis to him in its original form. The third examiner will be provided with copies of the evaluation reports of all examiners, external and internal, with the names of the examiners deleted. The recommendation of this 'third' examiner, at this stage, shall be taken as final.

(iv)   Both the examiners reject the thesis, and then the student is declared, "failed".

15.4   In the event of a thesis being rejected by both the examiners the Senate may, on the recommendation of the MSC, permit submission of a revised thesis on an additional payment of the prescribed fee, after a suitable time to be fixed by the Senate (Not less than one year from the date of the intimation to the student and within 4 years from the date of enrolment). The observations and comments of the examiners, if any, may be copied and given to the candidate on request. In no case should a resubmission of the thesis without modification along the lines of criticism made by the earlier examiners be allowed. The revised thesis shall be referred for assessment to two examiners selected from a new panel of ten experts recommended by the MSC. The new examiners will be provided with copies of earlier thesis, examiners' reports and details of changes made, in addition to the revised thesis.

The examiners need to respond specifically to the observations of the earlier examiners and the changes made

by the student before re-submission.

15.5   After the recommendations of the MSC(either for acceptance of the thesis for the M. Tech. (R) degree or for its rejection/modification) have been accepted by the Senate (or its Chairman on its behalf) a copy of the reports of the examiners may be issued to the candidate at his request. However, the names of the examiners are not to be disclosed.

15.6   Once the reports of the examiners have been accepted as satisfactory, the candidate will have to defend the thesis before a viva voce board consisting of all MSC members and an examiner other than the supervisor. The defense will be open where faculty members and students of the parent as well as other departments will be invited. The evaluation, however, will be done by the MSC along with the external examiner. The 'external' examiner may either be one of the experts who have already adjudicated the thesis or be another expert appointed for the purpose. The viva voce board may recommend changes in the thesis.

If the viva voce board is not satisfied, the candidate has to appear again before the board after elapse of three months. The MSC shall recommend to the Senate the award of the M. Tech. (R) degree if the viva voce is satisfactory and all other requirements have been fulfilled.

15.7   On completion of the viva voce, the student will submit two copies of the revised thesis and two copies in electronic media, which, will be archived in Institute and Departmental Libraries. All available copies of the original version will be returned to the student. The copies available with the student and his supervisor(s) must also be corrected.

15.8   The departments shall use Forms AC/318, AC/319 and AC/321 – AC/325 for recording various recommendations of the committees and decisions of academic authorities.

16.   Award of Degree

16.1   On the recommendation of the Masters Scrutiny Committee, the Senate or the Chairman, Senate (when the Senate is not sitting early) shall decide whether the candidate should be awarded the degree of Master of Technology (by Research). If the Chairman, Senate has approved the award of degree the award must be confirmed by the Senate.

16.2   Normally a student will be awarded M. Tech. (R) degree in the branch of study in which he is enrolled. But in exceptional cases, the MSC may recommend to the Senate to award the degree in another branch depending on the contents of the thesis. This can be done at the time of provisional-registration (preferred), Registration or even after the thesis is submitted.

16.3   A provisional certificate may be issued to the student on approval of the Director. The final degree certificate will be issued in the convocation or by any other mode approved by the Senate.

17.   Conduct and Discipline

17.1   Students shall conduct themselves within and outside the campus of the Institute in a manner befitting the students of an Institution of National standing.

17.2   Detailed rules regarding conduct and discipline are given in Appendices–IV and VI.

18.   Progress of Research Programme

The progress of the research programme of a student shall be continuously monitored by the Doctoral / Masters Scrutiny Committee. In practice, the committee will depend on inputs from the supervisors, HOD and the student. It will be the responsibility of the student to ensure that his papers remain up to date in matters of registration, course work, extension of fellowship, withdrawal and other formalities. In case of any deficiency, he should draw attention of his supervisor(s) and HOD, and if unsuccessful, that of the Dean (AA) and Director.

Although rare, sometimes there may be a breakdown of communication between a student and his supervisor due to physical distance or due to personal reasons. It shall be the responsibility of the student to bring such matters to the attention of HOD, Dean (AA) and Director. The Institute shall do the needful to establish communication or to make alternative arrangement.

19. **Termination of Studentship**

The studentship of a M. Tech. (R) student may be terminated by the Senate on exceptional grounds. They are:

1. Recommendation of Institute's Disciplinary Committee.

2. Poor progress as noted by the Masters Scrutiny Committee and Departmental Academic Committee (PG&R). Such a decision may be implemented only after approval of the Senate.

3. Failure to do semester registration for two consecutive semesters.

4. Prolonged absence (exceeding three months) from the Institute without sanctioned leave or withdrawal.

20. **Transition issues**

These regulations shall come into effect from AY 2007-08 Autumn Semester. Students enrolled prior to this date shall also be covered under these regulations, except when the implementation of these regulations leads to obvious anomalies and serious hardship to the students. The final decision on each specific issue will be taken by the Senate (or Chairman Senate on its behalf) on case-to-case basis.

21. **Dissemination of information**

21.1 A copy of this document shall ordinarily be given in print or electronic form to every M.Tech student on admission to NIT Rourkela. It will also be made available on the Institute's web site. Not possessing a copy, however, shall not exempt a student from complying with these regulations.

21.2 The Assistant/Deputy Registrar (Acad) is authorized by the Institute to issue formal certificates of studentship [Form AC/115] and Expenditure Certificate [Form AC/116]. Dean (AA) will sign all certificates of studentship on behalf of the Director when external agencies seek such certificates from Head of Institution.

21.3 On publication of final results a student will be issued a provisional certificate on Form AC/127 and a Institute leaving cum migration cum conduct certificate on Form AC/126. Form AC/127 will be signed by Dean (AA) on behalf of the Director, while Form AC/126 will be signed by Dean (SA). The final degree certificate will be signed by Registrar, Director and Chairman, Board of Governors.

22. **Exceptions**

Notwithstanding anything stated in the rules, the Senate can make special provisions and exceptions depending on the merit of a case. Such cases shall not be cited as precedence in future occasions of similar nature, because two situations though similar may not be identical.

In emergency situations, the Director in capacity of the Chairman Senate, can exercise powers of the Senate and discharge the functions of the Senate. Such decisions must be reported to the Senate at its next meeting.

REGULATIONS
FOR

PH.D. DEGREE IN ENGINEERING, SCIENCE
&
HUMANITIES AND SOCIAL SCIENCES

(EFFECTIVE FROM ACADEMIC SESSION 2007-08)

NATIONAL INSTITUTE OF TECHNOLOGY
ROURKELA

C O N T E N T S

1. Introduction

1.1 The Institute provides facilities for research leading to the Degree of Doctor of Philosophy (Ph.D.) in Engineering, Science, Humanities and Social Sciences in various disciplines as mentioned in Appendix—I.

1.2 The Ph.D. thesis shall be the report of the research work characterized by either discovery of new facts, new interpretation of known facts and theories, an independent design or development, development of a new instrument or technology, an exhaustive study and criticism of published work, or any applied research work that can be exploited for creation of wealth of for human well being.

2. Eligibility

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

2.1.1. 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.

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

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

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

2.1.5. M. Sc. /M.A. / MBA / M.Com. in Humanities or Social Sciences or Management with CGPA 6.5 or 60 per cent marks.

2.2. In computing the CGPA or percentage of marks, all papers of a B.Tech., M.Sc., M.Tech or any other programme will be considered both in numerator and denominator.

2.3. Universities some time record their own conversion of marks to grade or vice versa on their grade sheets. Under such circumstances NIT Rourkela will accept only the original mode of evaluation ignoring the conversion.

2.4. In exceptional cases, where the candidate has proven research experience, evidenced by published papers and/or unpublished documents, the Senate, or Chairman Senate on its behalf, can relax the mark requirement by 5 percent (or 0.5 in CGPA). Copies of the documents considered for the purpose must be presented to the Senate.

A further concession of 5% in B.Tech/M.Sc. marks or 0.5 in CGPA may be given by the Senate to candidates sponsored by Government departments or autonomous bodies under the Government who have put in at least 5 years of service in a relevant assignment. Such candidates will be required to complete at least 8 credits of undergraduate courses with minimum B grade in each, in addition to the normal course requirements.

2.5. Students with degrees in one discipline of Science or Engineering can enroll for Ph.D. in another discipline of Humanities, Science or Engineering, if such migration is considered relevant by the Departmental Academic Committee (PG & R). The constitution and functions of DAC (PG & R) are given in Appendix – VII. The Senate will announce, from time to time, a list of relevant departments and specializations for admission to Ph. D. programme in each discipline. In all other cases, the decision must be made by the Senate (or Chairman Senate on its behalf) on case to case basis depending on the fields involved, proposed research programme and academic preparation of the candidate. A list of required specializations for various departments is given in Appendix – II. Students without adequate background in the primary discipline (listed in Appendix – II) will be required to have 10% extra marks (1.0 in CGPA) to qualify over students with specialization in a primary discipline, unless explicitly exempted by the Senate.

2.6. Qualification in GATE or NET is not essential for admission to Ph.D. programmes. Students applying for Institute or Government scholarships / fellowships, however, shall need an M.Tech. degree or a valid NET (Lectureship or JRF) or GATE score, if required by the Government regulations.

2.7. The various categories of students (with or without financial support) mentioned below are eligible for admission to Ph.D. programme provided they satisfy the qualification requirements as given in section 2.1.

    1.   Full time student with Institute Fellowship /Assistantship (Institute Scholar)

    2.   Full time student with External Fellowship (UGC/CSIR etc.)

    3.   Full time student without Fellowship (self financed/self supported)

    4.   NIT faculty

    5.   NIT regular employees (Non teaching)

    6.   Project Scholars (JRF/SRF/RA etc.) or project staff members

    7.   QIP Scholars

    8.   Sponsored student (Institute/Research Organisation/Industry)

    9.   Sponsored student from Rourkela and vicinity [part time]

2.8 Unlike other academic programmes, mere possession of required degrees and a superior academic record do not guarantee admission to a student to the Ph.D. programme. Apart from academic record, the DAC will take into consideration the research aptitude, ability to work in a team, subject interest, availability of supervisors, facilities in the department and the department's research focus while selecting candidates to the Ph.D. programme.

3.   Admission

3.1 All categories of candidates except the members of the Institute faculty, QIP scholars and scholars nominated by the Central Government have to be selected by Departmental Academic Committee (PG&R) on the basis of overall academic performance, written test and/or interview.

3.2 Candidates employed as SRFs/JRFs or as Full time Research engineers/officers in sponsored projects may be admitted to the Ph.D Programme under category 6. They need to obtain permission of the Principal Investigator and Dean (SRICCE) for admission. The project should have tenure of at least 18 months beyond the date of admission of the candidate to the Ph.D. programme. They also have to satisfy the qualifying marks requirement and will undergo selection procedure like other students. On termination of the project, their status will be full time student without scholarship (Category 3), unless offered another type of scholarship. Students who have earned a GATE/NET score or have M.Tech. degree and have availed at least 18 months of fellowship under a project will get first priority in award of Institute fellowship, irrespective of number of fellowship holders under the same supervisor or in the same department.

3.3 Members of teaching staff desirous of enrolment in Ph.D. programme can do so without any selection formality. No administrative permission is necessary. They will be guided by all other norms for Ph.D. registration and thesis submission as per regulation. They will apply to the Institute for admission in the standard application and enrolment forms. If the faculty member applies for admission to his own department, selection is automatic. But if he/she applies for admission in another department, the DAC of the destination department will examine the proposal. No formal interview is necessary. Admission will be given if DAC recommends.

3.4 Non-teaching staff of the Institute may be permitted to join the Ph.D. programme under following terms and conditions:

    (i)   A member of non-teaching staff seeking permission to join the research programme must hold a permanent post in the Institute and must have a standing of at least 3 years service in the Institute in the same cadre.

    (ii)   The employee must be engaged in research as a part of his normal duty, so that his work output can qualify for the degree of Ph.D. Study towards Ph.D. cannot be done on a part time basis outside the working hours of the Institute.

    (iii)   The application for administrative permission to join a research programme by a member of non-teaching

staff must be submitted to the Director through the Head of the Department/Centre or the section in-charge, as the case may be where the candidate is employed. While submitting the application he/she must give an undertaking to the effect that he/she will abide by all rules and regulations.

(iv)   Administrative permission by the Director does not constitute academic approval of the Senate for admission.

(v)   The application will be examined by the Departmental Academic Committee (PG & R) of the department where the candidate wants to be enrolled. The committee will interview the candidate to ascertain his suitability in the programme.

(vi)   Regular non teaching staff appointed in sponsored research projects for carrying out research work may be given leave without pay from the Institute to work in the project and pursue Ph.D. programme simultaneously. In deserving cases, Director, at his discretion, may approve payment of partial salary (up to 50%) and waive lien charges, against services rendered to the Institute.

(vii)   Every application for admission under this category shall be examined by the Research Programme Evaluation Committee(RPEC) taking into account whether the proposal for joining the programme for which permission is sought for arises out of genuine interest and ability, and whether the normal job assignment of the applicant sufficiently overlaps with the proposed research programme. Final permission will be accorded by the Senate.

(viii)   The members of the non-teaching staff applying for Ph.D programme must satisfy the minimum qualification requirement as mentioned in para 2.1.

3.5   Candidates sponsored by major public and private sector employers are given concessions in admission and subsequent requirements. The norms for admission of sponsored candidate are given in Appendix - X.

3.6   Students enrolled in the M.Tech (Res) programme may shift to the Ph.D. programme on recommendation of the Masters Scrutiny Committee and approval of the Senate. All such proposals will be examined by the RPEC before presentation to the Senate. In such a case the Senate will appoint a DSC and work out course requirement, and the student can submit Ph.D. thesis only after satisfying all requirements of the Ph.D. programme.

3.7   Candidates desirous of pursuing Ph.D. programme must apply in prescribed form (Form AC/301) to the Deputy/Assistant Registrar (Academic) either on their own or against an official advertisement. These applications will be scrutinized by the Departmental Academic Committee (Form AC/302) of the concerned department. The recommended candidates, on approval of Dean(AA), will be called for personal interview with the Departmental Academic Committee.

The Committee, through written or oral examination, or a combination of both components, shall ascertain suitability of the candidates to the Ph.D. programme and give its recommendation to the Dean (AA) for approval (Form AC/303).

While selecting a candidate for studentship with or without scholarship, Departmental Academic Committee will consider not only the merit (career, depth and breadth of knowledge in chosen and allied fields) of the candidate, but also the research aptitude and ability to work in a team and motivation to complete the programme. The Committee shall also ascertain that at least one faculty member of the Department is available and willing to supervise the candidate if selected in his/her chosen field. [The faculty member will not have the option to refuse, if the candidate opts to work under him after joining.] A candidate should not be selected if the Department does not have physical resources and supervising faculty to do justice to the candidate's academic interest.

If a candidate recommended for admission has a close relative serving in the Institute as an Officer or a member of the faculty, the application should be so identified and sent to Director for approval. The Director may, at his discretion, approve the recommendation or refer to a committee on conflict of interest.

3.8   The admission letter (Form AC/304) will be issued by the Deputy/Assistant Registrar (Academic) to a successful candidate on the basis of recommendation of the Department and approval of Dean (AA)/Director.

3.9   On joining the Institute, submitting the enrolment form (Form AC/305) duly forwarded by the Department and after paying the prescribed fees, the candidate will be assigned a Roll number by the Academic Section.

3.10   The Academic Section will allot the candidate to a hall of residence. Students not desirous of staying in a hall must seek permission from the Dean (AA) to stay outside. A student permitted to stay outside the halls shall be attached to a hall and will be required to pay appropriate hall fees.

3.11   Admission to the programme may be given at any time of the year. The fees, however will be for a full semester. Summer is included in the Spring semester.

4.   Supervisors

4.1   All candidates for Ph.D. degree are required to carry out their research work under the guidance of ONE/TWO supervisors, to be appointed by the Senate, or Dean(AA)/Director on its behalf, on recommendation of the Departmental Academic Committee (PG & R). Ordinarily the DAC will recommend one Supervisor. However in case of inter-disciplinary research (within the same department, across two departments or across two Institutes) a second supervisor may be appointed.

4.2   When there are two supervisors, one of them will be called the Principal Supervisor. Ordinarily the Principal Supervisor will be a faculty member of the registering department. However in deserving cases the DAC (PG & R) may recommend a faculty member of another department of the Institute as Principal Supervisor.

4.3   (a)   The supervisor may be in the rank of Asst. Professor or above with or without Ph.D. degree or Lecturer with Ph.D. degree.

        (b)   A sponsored student desiring to work in his/her place of employment should have a supervisor from his/her organisation. The joint supervisor so proposed must have a Ph.D. Degree or at least 10 years of relevant professional experience. In case of Academic Institutes a Ph.D. Degree is necessary to become a joint supervisor. In deserving cases, the Senate may accept a supervisor from the sponsoring College/ University without a Ph.D. degree.

        (c)   In special cases, where persons of adequate academic standing are not available in the sponsoring organization, and adequate physical facilities are available to ensure frequent contact between the student and his/her supervisor at NIT, Rourkela, the Senate may accept only one supervisor, who is a faculty member of NIT. The student will then be enrolled under category 9. Such proposals should be specifically approved by the Senate.

        (d)   In special cases, if it is felt to be beneficial to the project because of special expertise, the second supervisor may be from another Institute, Industry or other organization. Such cases shall be approved by the Senate on the recommendation of the DAC (PG & R) and RPEC.

4.4   Regular faculty members of the Institute enrolling in Ph.D. programme may be self- guided. Such cases should be examined by RPEC and put up to the Senate for approval.

4.5   A teacher with less than 2 years service left before superannuation may not be recommended as sole supervisor or principal supervisor. After superannuation a teacher will continue to be the sole supervisor if the thesis is submitted within 6 months; if it takes more than 6 months a substitute supervisor has to be appointed by DAC(PG&R). If no faculty member is willing to take up the assignment, the Director, as Chairman, Senate, will appoint the supervisor in consultation with the HOD. This selection will be binding on the student and the supervisor.

4.6   After superannuation from service if a person joins the Institute on re-employment or as Emeritus Scientist or on some scheme of UGC/AICTE, he will continue to be the sole supervisor or as Joint supervisor as he was before superannuation.

4.7   Persons from outside the Institute joining as Chair Professors/Emeritus Scientists can be appointed as supervisors for new scholars only jointly with a regular teacher, but not as sole supervisors.

4.8   A substitute supervisor can be appointed by DAC(PG & R) if a sole supervisor leaves the Institute. If the sole supervisor proceeds on long leave for a period exceeding one year, the DAC (PG & R) shall appoint a second supervisor, who will serve as co-supervisor when the original supervisor returns.

4.9   During the course of a Ph.D. programme, if the supervisor, the DSC, the HOD or the Departmental Academic Committee feels the necessity of a second supervisor, an appropriate proposal must be prepared and placed

with full justification before the DSC. The recommendation of DSC will be further considered by the Departmental Academic Committee. If agreed by the DAC, the proposal may be placed to the Senate through the RPEC.

4.10 A student's preference of subject and supervisor must be taken into consideration by the HOD and DAC while assigning a supervisor to him. There should not be any undue restriction on faculty or students in choice of students or supervisors, particularly under categories not involving institute fellowship. The DAC should record the reasons for not honouring the request of a student. The DAC may, however restrict the number of Institute fellowships (including those from QIP and special projects) allocated to a supervisor or research group.

4.11 There shall be no limit on maximum number of research scholars a faculty member can guide. The department may, however, regulate the number of students with Institute fellowship (including QIP and other fellowships allotted to the Institute) that will be assigned to each faculty. For example, a faculty member can get a second student with Institute fellowship only when there is no other eligible and willing faculty member to accept a student in the same major area (specialization) within the department. Students with individual fellowship, project fellowship, without fellowship and those current Institute scholars who have completed three years after admission will not be counted for the purpose.

5.   Doctoral Scrutiny Committee (DSC):

5.1 A Doctoral Scrutiny Committee shall be constituted by the Senate for each candidate admitted to the Research Programme leading to Ph.D. degree on recommendation of the DAC(PG&R) of the Department.

It shall consist of the following members:

1.	Head of the Department (ex officio)	- Chairman
2.	Principal Supervisor	- Convener
3.	Second Supervisor (if applicable)	- Member
4.	One faculty member from the department where the candidate is enrolled to be nominated by DAC (PG&R)	- Member
5.	One faculty member from the same or a related department nominated by DAC (PG & R)	- Member
6.	One faculty member from another department nominated by Dean(AA).	- Member

If the Head of the Department is a supervisor, the Chairman of the DSC will be nominated by Dean(AA) from within or outside the department, who will serve as Chairman of DSC as long as the supervisor is HOD. When a supervisor assumes the charge of a HOD, he will request Dean (AA) to nominate the Chairman of DSC in his place.

5.2 No teacher who is enrolled for any M. Tech. or Ph. D. degree in the Institute or outside shall be a member of DSC till completion of his/her degree.

5.3 The composition of the DSC shall be proposed by the DAC (except for the member from outside the department) when a student joins the Department and the recommendation shall be sent to the academic section. The academic section shall obtain approval of Dean (AA) and bring out an office order on Form AC/306 stating the constitution of the DSC. The Committee will hold its first meeting immediately on formation to process the formalities of "Provisional Registration". This process will be completed within a month of a student joining.

5.4 The Principal Supervisor, acting as the convenor of the DSC, will normally organize the meetings of the DSC after obtaining suitable dates from the Chairman and the members. Ordinarily, DSCs should meet within two working days of initiating the process. In case of difficulties in finding time convenient to all, or when a DSC is unable to reach a consensus, the Dean (AA) may be approached by either the Chairman or the Convenor to organize the meeting for making appropriate recommendations to the Senate. The Dean (AA) may, at his discretion, nominate additional members with relevant expertise from the same or other departments to assist in the specific task

5.5 The DSC shall always record its recommendations with appropriate reasoning and enclosures, and formal minutes should be drawn and signed during the meeting. There shall be no provision for delayed preparation of minutes nor for confirmation of minutes.

5.6 Decisions of MSC shall normally be arrived at by concensus among members. In case of serious disagreement among members, the Chairman of MSC shall record the different viewpoints and put up to Chairman Senate through Dean (AA) for a decision. The Chairman's decision shall be binding on all concerned.

6 Enrolment and Provisional Registration

6.1 On receiving a letter of admission, every student joining the Ph. D. programme shall meet the Head of the Department and submit an application for enrolment in Form AC/305. The HOD will call the DAC (PG & R) and assign the student to one or two supervisor(s), and will recommend the structure of the DSC. The student will present the recommendation of the Department to the Academic Section who will permit him to pay the fees and assign a roll number. During this period, (not to exceed one week) the student will get free accommodation in the student hostel, but will pay for the meals.

6.2 All the candidates admitted to the Ph.D. programme are required to enroll in the programme on payment of the prescribed fees as given in Appendix - V and to carry out research work under a supervisor (or two supervisors) as mentioned in Clause 4. The enrolment will be with effect from the date on which a student is assigned a roll number [Form AC/306].

6.3 Within two weeks of enrolment, the student shall submit an application [Form AC/307] for provisional registration, in consultation with the supervisor. The application shall contain details of a student's career and his broad area of research.

6.4 The Doctoral Scrutiny Committee will examine the application and recommend "Provisional Registration". The provisional registration will record [Form AC/308] the area of research and the course work assigned. The process should normally be completed within one month of the student's joining the department.

6.5 The effective date of provisional registration shall normally be the date of admission. The DSC may extend the date if a student does not initiate his course or research work immediately on enrolment.

6.6 The DSC shall also record any previous research work (relevant to proposed topic) done and express it as equivalent research credits, not to exceed 48 credits of research. The evaluation will cover all written documents (e.g. published papers, original research records, unpublished in-house documents etc.), submitted by the student. Merely holding a position of research will not qualify for these credits. The DSC will record and present all documents to RPEC / Senate. These credits will be used in calculation of months of early submission if so requested by the student.

7 Residential Requirement

7.1. Normally all candidates admitted to the Ph.D. programme will be required to stay in the Institute till they complete all assigned work and submit thesis. However, for sponsored candidates who do not have to complete any course work, the DSC may recommend to reduce the minimum residential requirement to either six months at a stretch in the beginning or to at least six months in combination (of which at least 2 months should be at the beginning), with each segment not less than two months, spread over a period of two years. The facility for splitting the residence requirement to 2 or 3 segments is available only to employees of national R & D organizations, R&D houses of major industries and Government officials who need to work in a team and whose absence seriously affects their projects at the place of employment. It is not available to candidates from educational institutions. Candidates who need to attend courses must stay on campus for the time required to complete the courses, but not less than 6 months. Students desirous of attending course work in other institutes (See Section 10.9) need to spend at least 6 months on campus of NITR.

7.2. If the candidate intends to carry out a major part of his research work in his place of employment, he must convince the Departmental Academic Committee (PG&R) at the time of selection that adequate research facilities and research tradition exist in his institution. While taking the decision DAC (PG&R) will examine all the documents presented to it regarding adequacy of the R & D facilities available in the sponsoring organisation. These documents have to be furnished by the candidate during the time of interview. In general major Central Govt. (CSIR, DRDO, DAE, ISRO, CDAC etc.) labs, research organisations, industries (public or private) with established R&D facilities are taken as organisations with adequate facilities. Regarding recognition of other organisations the DAC (PG&R) has to make a recommendation on the basis of the material available to it, to the Director/Dean (AA) for approval. In every case, the Senate will decide the residential requirement and whether it can be split into segments.

7.3. Candidates employed in teaching or R&D Institutions within or in the vicinity the city of Rourkela and permitted

by the employer to spend sufficient time on research at NIT may be exempted wholly or partially from the compulsory residential requirement. In special cases, the Senate may extend the same facilities to employees of industry engaged in R&D or related (e.g. management) activities. In such cases the minimum duration of research shall be 3 years for students with M.Tech. degree and 4 years for others.

7.4. Form AC/312 should be used to report residence record of a student to the academic section for records.

8. Attendance and Leave

8.1 A research student, except when granted withdrawal by the Institute must attend to his work on a whole time basis. The department will maintain attendance record of the student, irrespective of whether the student is getting a scholarship or not. The DSC will examine the attendance record of students, and if it is found unsatisfactory, will recommend extension of minimum duration for submission of thesis, deregistration or termination of studentship as it thinks fit.

8.2 A teacher of a course may debar a student from appearing in examination on ground of unsatisfactory attendance.

8.3 The working hours of Ph.D. and M.Tech(R) students is generally permitted to be flexible, but not lower than that of a full time employee. It is the supervisor's legal and moral responsibility to ensure that proper work environment is made available to the student. The students are encouraged to discuss such issues with their supervisors, with HOD and higher authorities.

8.4 A research scholar other than Institute staff is eligible for following leave per academic year to be permitted by the Head of the Dept. on recommendation of the supervisor (s).

i) For incidental purposes, CASUAL LEAVE – 15 working days.

ii) For treatment on illness, MEDICAL LEAVE – 15 days (including intervening holidays).

Dean (AA) may sanction casual leave and medical leave upto 15 additional days each in deserving cases. Leave beyond 15 days CL and 15 days ML will be without fellowship. Director may approve leave beyond this period, the excess leave being without fellowship and the minimum period of stay being extended accordingly. Leave for coursework will be governed by relevant M.Tech regulations.

If a student falls ill outside the Institute (only if he is out on approved leave or deputation), the Medical Certificates must be seconded by an Institute Medical Officer. The student must prove the genuineness of the illness by submitting medical attendance slips, referrals, diagnostic reports, medicine purchase receipts and all other medical papers in original before the Institute medical officer and/or Dean(AA) / Director.

There is no summer or winter vacation for research students.

In matter of course work, leave rules applicable to M. Tech. courses will will also be applicable to Ph. D. and M. Tech. (R) students.

A student may be granted mess rebate for authorized absence (on leave or travel on duty) of 5 days or more, provided the hall office/caterer is informed in advance.

Forms NITR/AC/208 and AC/111 may be used by students while applying for leave of absence from course or research work on leave, academic or student activity.

9. Semester Registration

9.1 A student enrolled in the Ph.D. programme will be required to register [Form AC/311] every semester by paying Institute dues and other fees. [The semester registration is to be distinguished from Academic Registration, discussed in Section 11]. A full time student must be registered for 26 credits of academic load including courses and research credits. Part time students, including those who have taken withdrawal from the Institute and students of Category-9 can be registered for no more than 18 credits.

9.2 Students who have been sanctioned withdrawal also need to do semester registration. They may, however, be permitted, in alternative semesters, to send registration form by post to their supervisors, who will present them to the Academic Section through the HOD. Thus a student taking withdrawal must register in person at least once

every academic year.

9.3   Failure to do semester registration for two consecutive semesters will result in termination of studentship, which can be restored by the Senate on consideration of all circumstances, payment of arrear fees and extension of thesis submission date.

9.4   It shall be the responsibility of the student to bring any deviation in his status in matters of course of work, registration, withdrawal etc. to the attention of Dean (AA) at the time of semester registration, if he has not done so earlier.

9.5   A student may be exempted from semester registration by Dean (AA)/Director if he submits thesis within 30 days of scheduled semester registration. If he fails to submit thesis within 30 days, he must do semester registration before the thesis is accepted for evaluation.

10.   Course Work and Academic Credits

10.1   Every full time student of Ph.D. programme must be registered for 26 credits of academic load per semester. The credit load will contain some regular courses and a two-credit course on "Seminar and Technical Writing", the balance being research credits. A student must acquire at least 104 credits after M.Tech. and 156 credits after other degrees (B.Tech., M.Sc., MCA etc) including research credits registered for during the semester of thesis submission before being awarded a Ph.D. degree.

A part time student may register for less credits depending on his involvement in other activities. While students engaged in full time research in R&D institutions whose job assignments match exactly with his thesis work may register for 24 credits of research per semester, others including college teachers and industry personnel may take maximum 16 credits of research load. The 2 credit course on "Seminar and Technical Writing" in addition to research credits is compulsory for all students in every semester.

The grades in Research course shall be awarded by the Principal Supervisor in consultation with the co-supervisor, if any.

The grades in the Seminar & Technical writing will be awarded to a student by the course teacher on the basis of participation in seminars presented by the fellow students and invited speakers, as well as on the quality of his own presentation in seminars and poster presentation.

10.2   Course work is compulsory for all students enrolled for Ph.D. except for those with M.Tech. degree in the same discipline obtained within 8 years prior to the date of enrollment.

The table below summarizes the minimum course requirement for different categories of students. Only postgraduate (600 or higher level) courses will count towards Ph.D. course requirement. The DSC, at its discretion, may recommend additional courses.

Present qualification of Candidate	Enrolled for Ph.D. in branch	Minimum number of course credits required
M.Tech.(Not earlier than 8 years ago)	Same discipline	None
M.Tech.(Earlier than 8 years ago)	Same discipline	08
M.Tech./M.Pharm	Another discipline	12
B.Tech./B.Pharm/M.Tech(R)*/ M.S.*	Same or Different discipline of Engineering, Science or Humanities	20**
M.Sc./MCA/MA/MBBS/MBA/ B.Pharm/ M.Phil*	Any discipline of Science/ Humanities	12
M.Sc./MCA/MBBS/MBA/B.Pharm	Any discipline of Engineering	20**

*   After assigning the course work, the DSC will examine the courses taken by the student as a part of his M. S., M.Phil or M.Tech.(Res) programme and grant exemption to the student for those courses which he has already studied.

** A student with B.Tech. degree registering in another discipline of engineering or a student with M.Sc./MBBS/ MBA/MCA/B.Pharm degree registering any discipline of engineering has to successfully complete additional B.Tech. course credits of at least 06 covering the fundamental papers of his new discipline. Depending on the subject area, additional course work may be recommended by the DSC.

10.3 The coursework may be chosen from the existing PG (M.Tech.) programmes of the registering Dept. or from those of other departments. If a student joins the Ph.D. programme in the middle of a semester, he must take courses in the following semester. Delay of maximum 10 working days can be condoned in joining a course. If a student needing course work does not get two full semesters to complete the courses, he may take one or more semesters to complete the courses.

10.4 The specific subjects of study will be decided by the DSC on recommendation of the supervisor(s). When a student joins at the beginning of a semester, he may be advised by his supervisor (s) to attend classes of recommended courses even before the provisional registration process is officially complete. In case the courses approved by the Senate are different from the courses being taken by the student, the student may at his choice discontinue or complete the courses recommended by the supervisor(s).

10.5 If recommended courses are not offered by the departments, the DSC can amend the list at the request of the supervisor(s) at least 2 weeks prior to the starting of a semester. Any such change needs approval of Chairman Senate after recommendation by Dean (AA). The change will be reported to Senate in its next meeting.

10.6 The candidate has to obtain an average grade point of not less than 8.00 (in research and course credits) and individual grade not less than C in each subject in the seven scale grading system. A course can be repeated to improve the grade if necessary. If the average course CGPA exceeds 8.50, the DSC may accept one course with grade lower than C.

Research credits lower than C will be ignored in calculation of credits completed.

10.7 In addition to courses of the M.Tech programme, a Department may offer special courses for Ph.D. and M.Tech (R) students during the semesters or during summer vacation. If a course is offered in summer vacation, the total number of contact hours and the pattern of examination shall be the same as other courses taught during the normal semesters.

10.8 In special circumstances if no appropriate course is offered under formal instruction, existing courses may be taken in "guided self study" mode, where a student studies the course from approved text and reference books under the guidance of a faculty member, works on assignments and/or examinations. Formal classes will not be required in such courses. The system of evaluation and grade calculation will be same as that existing in M.Tech. programmes. Ordinarily, a student should not be registered in more than two courses in self-study mode. It should be appreciated that the objective of course work is to enhance the breadth of knowledge. They should be relevant to the research area, but need not be repetition of the research subject. Courses under "guided self study" mode will not be taught by a student's supervisors.

10.9 It will be possible for a student to enroll in a course not offered by NIT, Rourkela, in another Institute(NIT/IIT/IISc) or University of repute (not an affiliated college) for a course and transfer the credits to NIT Rourkela to satisfy the requirements of Ph.D. degree. A proposal for such transfer must be submitted by the supervisor to the DSC along with all details (syllabus, duration of instruction, name and details of instructor). The DSC's recommendation will be placed before the Senate through RPEC. In case of urgency, the Chairman, Senate may approve enrollment in the course in consultation with Dean(AA).

On completion of the course, the student shall submit to the academic section the grade certificate from the instructor countersigned by the Director/Vice Chancellor Registrar/Deputy Registrar (Academic) of the Institute or University. A photocopy may be submitted to the HOD for departmental record.

10.10 All doctoral students must register for the two-credit course named "Seminar and Technical Writing" in every semester. Resident students will satisfy the course requirement by attending Institute and Departmental Seminars, presenting seminars and poster presentations to departmental audience and submitting technical writings on assigned topics. Non-resident students will submit equivalent amount of technical writing and reports on seminars attended at their own places of work. If a student does not accumulate the required credits with at least C grade, he will not be permitted to submit his thesis. In special cases, if a student is ready with his thesis but has not

cleared the required credits, the Director may, at his discretion, give him special assignments and appoint an examiner to evaluate the output.

10.11 Institute employees including persons employed in sponsored projects may enroll in courses of their choice before enrolment in M.Tech(R) or Ph.D. programme under intimation to the Academic Section. When they join a Ph.D. or M.Tech(R) programme, the course and the credit earned may be counted towards course requirement at the discretion of the M.S.C. or D.S.C.

10.12 Ph.D. and M.Tech(R) students enrolled in PG and UG courses are subject to the same regulations as applicable to other students in the courses with regard to attendance, discipline, assessment and grading.

11. Comprehensive Examination And Registration

11.1 Each candidate enrolled for the Ph.D. degree is given provisional registration on applying in prescribed form(See Section 6.1). This application shall be considered by the DSC in its first meeting, which will be held within one month of a student's date of admission. The DSC, on suggestions of the supervisor(s), recommends:

a) the broad area of research,
b) the course work to be carried out by the student.

11.2 A doctoral student, provisionally registered, will be formally registered for the degree of Ph.D. on completion of certain steps. The registration can be done only after (a) the candidate has successfully completed all assigned course work (See Section 10), (b) worked out a road map of his doctoral programme (c) successfully cleared the comprehensive viva-voce and (d) delivered an open seminar. On completion of the course work (if any) a student will appear in a comprehensive oral examination to assess his depth and breadth of knowledge in the intended field of specialisation. The Doctoral Scrutiny Committee will become the examination board. One additional member will be inducted by the H.O.D. from the department or outside with specialization close to the area of research.

After satisfactory clearance of this examination, the student has to present his progress and plan of work to all members of the DSC in the form of a written document [Approximately 5 pages]. Within a week of handing over the report, the Department shall arrange a seminar by the student in the presence of the DSC. It should be an open seminar in the department, with invitation extended to students and faculty of all departments.

The written document and the seminar should outline the planned research work and identify the milestones. Both excessive vagueness, as well as exact description of the work to be done are discouraged at this stage to facilitate focused research work without being constrained. The broad objective stated in provisional registration order may be further focused at the time of registration.

Normally this should be done after elapse of 6 - 9 months from date of admission, but not later than 15 months. When a student fails to clear the course work within 15 months, or his seminar performance is unsatisfactory, he may be re-evaluated after a lapse of 3 months or more. If he cannot clear the course work, comprehensive viva voce and seminar within 2 years from the date of admission, he will be required to leave the Ph.D. programme. In special cases with mitigating circumstances, the Senate can grant extra time with or without scholarship.

The DSC will recommend the effective date of registration depending on the progress of the student, but not prior to the effective date of provisional registration. If found unsatisfactory, the presentation can be given after 3 months, in which case the effective date of registration also shifts. The effective date of registration cannot be earlier to the date of seminar by more than 15 months except when the course work has taken 3 or more semesters. In such cases one additional semester may be granted by the DSC.

A student may request early submission of thesis at the time of registration. The DSC, at its discretion, may recommend early submission up to one year, but not more than n/4 months, n being equal to the number of research credits the student has earned prior to joining the research programme, as recorded in pre-registration order.

11.3 The Head of the Department will send the application for registration [Form AC/309] to Dean(AA) along with a copy of the student's written report and recommendation of the DSC. The matter will be placed before the Senate through RPEC for approval.

11.4 The Academic Section shall bring out an office order [FormAC/310] confirming the registration after it is passed

by the Senate.

11.5   At the end of every semester, the Academic section will issue an unsigned "grade card" on Form AC/325 listing all the courses and the grades obtained including research credits and Seminar and Technical Writing courses. At the end of the academic programme, a signed grade sheet will be issued on a student's request and payment of prescribed fees after completion of four semesters.

12.   Fellowship

12.1   A doctoral student may be self-financed or can get a scholarship. In case of students awarded a scholarship by an external agency or from a research project operating in the Institute, the rules shall be governed by the provisions specified by the sponsor. Institute doctoral fellowships shall be governed by the rules of MHRD.

When the number of Institute fellowships is limited, they will be distributed among different departments by the Director on recommendation of Dean (AA). Generally, the number of fellowships will be proportional to the faculty strength, but changes can be made to ensure that the positions are filled to the extent possible.

12.2   Students who join with fellowships from sponsored projects or with external fellowships, and become self financed on termination of the project, will get preference in award of institute fellowship, if their academic performance is satisfactory and they have drawn fellowship from the project for at least 18 months. The total duration of scholarship, however, shall not exceed the limit set by MHRD.

12.3   Institute fellowships may not be awarded to candidates above 32 years of age [35 years for SC/ST and women candidates] on the date of selection. The restriction shall not apply to scholarships awarded by external agencies or sponsored projects.

13.   Withdrawal

A student, pursuing Ph.D. by staying on campus, can become non-resident by taking withdrawal from the programme. Such programme can be granted on one of the following grounds :

(a)   When a sponsored student wishes to return to his place of work on completion of at least two months of residence requirement, provided that such a scenario was mentioned in his application for admission. He needs to re-visit the Institute and complete residence requirement. The minimum period of work will be extended by one year, except when the student is employed in a superior R&D organization.

(b)   When, on the certification by the supervisors, the DSC is satisfied that most of the experimental/computational work has been completed, and that the student can finish the rest of the project from outside. In this case the student shall submit a long report for scrutiny by the DSC.

(c)   When a regular student returns to his original place of employment or secures new employment, and the D.S.C. is satisfied that adequate facility exists in his place of work to carry out the project. The employer's sponsorship and a second supervisor must be ensured before such requests are considered by the DSC.

(d)   When a student, for personal or financial reasons, intends to take a temporary break and return to the Institute for completion of the work, [The minimum period of work before submission of thesis is extended by the period of absence], or

(e)   Any other circumstances, which in the opinion of the Senate, justifies withdrawal.

For withdrawal under clause (b) or (c) above, a student should have completed 2 years of study after M.Tech or 3 years of study after B.Tech/M.Sc degrees.

The following rules shall govern the withdrawal process:

(a)   The student shall do semester registration regularly, personally visiting the Institute at least once a year.

(b)   He shall pay all applicable fees every semester.

(c)   He completes the programme within the stipulated period (8 years) including the withdrawal period.

(d)   He will be entitled to a room in the hostel with all related facilities during his visits to the Institute, at approved rates of seat rent for short stay.

(e)   After withdrawal, a student may register for a maximum 16 credits of Research per semester plus two credits of Seminar and Technical Writing. When his job assignment matches exactly with his thesis work, the Director or Dean(AA) may permit him to register for 24 + 2 credits.

A student must apply to Dean (AA) through his supervisor(s) and HOD for withdrawal in prescribed form [Form AC/204] along with a report on the work done so far and plan of activities in future. The Supervisor will state the status of the project and the D.S.C. will examine the proposal. Withdrawal can be granted provisionally by Director if satisfied, and be presented to Senate for final approval. The Assistant / Deputy Registrar (Acad) will issue an withdrawal order on Form AC/205.

14.   Submission of Thesis

14.1   A candidate with M.Tech. degree registering in the same discipline can submit the Ph.D. thesis after elapse of at least 2 years from the effective date of registration. The minimum period should be 3 years in all other cases. [It should be noted that this minimum period is applicable to students with exceptionally brilliant career or cases where a student has achieved an unusual success. In most cases the duration of work should be 3 years or higher after M.Tech., and 4 years or higher after B.Tech. or M.Sc.] The maximum period for submission of thesis is 8 years from the effective date of registration for all candidates. In all cases, the Doctoral Scrutiny Committee must be satisfied that adequate work has been done by the candidate.

In exceptional cases, if a student completes his Ph. D. work in a period less than that suggested above, the date of thesis submission of this student can be advanced if such a proposal originating from the supervisor of the student is forwarded by DSC and recommended by RPEC (Appendix¬ VIII) and finally approved by the Senate. While recommending a student for early submission, the DSC must clearly state the circumstances leading to early completion of the work. The reasons for early completion may be (i) work done by the candidate in the topic of interest prior to registration which have not been submitted to any other Institute or University for award of another degree or diploma, (ii) an exceptionally brilliant idea or experimental success, or (iii) any other reason not ordinarily expected from a full time research student. In case reason (i), it is mandatory that this work is recorded by the DSC at the time of provisional registration.

Prior to submission, the candidate will submit [Form AC/315] the synopsis of the thesis [typically 10 pages including tables, graphs and references] and present a seminar to an open audience, which will include members of DSC. Copies of the synopsis should be handed over to the members of the DSC well before the date of the seminar. If the DSC is satisfied with the extent of work done, the candidate will be allowed to submit the thesis. The DSC should confirm that the student has earned the required number of course and research credits including the courses registered for in current semester and has cleared two credits of Seminar and Technical Writing per semester. If the DSC is not satisfied with the progress of work, the candidate has to appear again after the lapse of 3 months or more.

If the DSC feels appropriate, it may, at its discretion examine the full draft thesis before a student is permitted to submit it for evaluation. The thesis must be submitted within 2 months after the DSC approves the synopsis unless extra time is granted by Dean(AA). Extension of the period beyond 8 years from the date of registration is not permitted. A student will be required to apply for fresh registration.

In extreme cases, if the DSC feels that the candidate cannot complete the thesis leading to Ph.D.degree, it can recommend to the Senate for award of M.Tech (Res) degree subject to satisfying all requirements of the latter programme.

14.2   A candidate shall submit [Forms AC/317 and AC/318] four copies of the thesis in case of single supervisor and five copies in case of two supervisors, neatly typed or printed and bound in a manner notified separately. The thesis must contain, besides the text and common matters like bibliography/references and summary/conclusions:

(a)   A certificate from the supervisor(s) that (a) the work has been carried out under his/their supervision, (b) the candidate has fulfilled all prescribed requirements and (c) the thesis which is based on candidate's own work has not been submitted elsewhere for a degree or diploma.

(b)   An abstract of the thesis (about 500 words) with key words (Maximum 20).

(c)   A preface/introduction in which the candidates shall state whether the thesis is based on discovery of new facts or new interpretation of established facts, or based on exhaustive study and critical analysis of published work of others, or design, or development work undertaken or applied research work.

(d)   Bio-data of the candidate within one page (i.e. name, date of birth, educational qualification, research experience, professional experience, if any, and permanent home address).

The candidate will also submit two copies of the thesis in electronic form and permit the Institute to use it in any manner that the Institute thinks fit. For the present, the electronic text should be submitted as two folders: one containing MS-WORD files and another PDF files. On completion of oral examination, a fresh CD may be submitted if any changes are made. One printed copy and one electronic copy shall be archived in Institute's Central Library, while another set shall be kept in the Department.

14.3   Format of the thesis should be uniform across all departments. Students are expected to use only S.I. units in reporting of all experimental and computational data, and to maintain appropriate number of significant figures.

15   Evaluation of Thesis

15.1   The DSC will suggest [Form AC/316] a list of 10 examiners (five from the country and five foreign). After successful completion of the synopsis seminar by the candidate the examiners' list along with a copy of the synopsis will be placed to the Chairman, Senate to select the External Examiners under both categories (Indian and Foreign) in order of preference. The Chairman, Senate may add any name to or delete any name from the list suggested by DSC. The supervisor(s) will also serve as examiner(s) in addition to the two external examiners.

15.2   The Dean (AA) will send a formal letter to the examiners along with a copy of the synopsis requesting for acceptance of Examinership. After receiving the consent, the thesis will be mailed along with proforma of Examiner's report. In case of refusal, the second examiner in order as ticked by the Chairman Senate will be contacted and so on. If in this process, the list is exhausted, the Dean (AA) may ask the DSC to submit another list. The internal examiners (supervisors) will also be sent copies of the thesis along with the proforma of examiner's report.

15.3   The reports of the examiners shall be summarised by Dean (AA) and placed before the Director. After obtaining Director's approval, the reports are forwarded to the DSC. There may be four possible situations arising out of the nature of the reports. The steps to be taken, appropriate to the circumstances, are laid down below:

(i)   The examiners are unanimous in recommending the award of the degree without any modification of the thesis. This is a clear case for going for the final requirement of viva- voce.

(ii)   The external examiners are unanimous in recommending the award of the degree but at least one of the examiners has suggested modification and/or has asked for clarifications. The candidate in that case shall make modifications and provide the clarifications as suggested within a time to be fixed by the DSC. These may be sent to the examiners, if so desired by them.

(iii)   One of the external examiners does not recommend the award of the degree and rejects the thesis whereas the other external examiner recommends the award. The DSC in such a case may either ask the candidate to modify the thesis as suggested within a given time not exceeding six months and send the modified thesis to the same examiner again, or, recommend to the Chairman, Senate the appointment of another external examiner and send the thesis to him in its original form. The third examiner will be provided with copies of the evaluation reports of all examiners, external and internal, with the names of the examiners deleted. The recommendation of this 'third' examiner, at this stage, shall be taken as final.

(iv)   Both the external examiners reject the thesis, and then the student is declared, "failed".

15.4   In the event of a thesis being rejected by both the external examiners the Senate   may, on the recommendation of the D.S.C., permit submission of a revised thesis on an additional payment of the prescribed fee, after a suitable time to be fixed by the Senate (Not less than one year from the date of the intimation to the student and within 8 years from the date of enrolment). The observations and comments of the examiners, if any, may be copied and given to the candidate on request. In no case should a resubmission of the thesis without modification along the lines of criticism made by the earlier examiners be allowed. The revised thesis shall be referred for assessment to two external examiners selected from a new panel of ten experts recommended by the D.S.C. (one foreign and one Indian). The new examiners will be provided with copies of earlier thesis, examiners' reports and details of changes made, in addition to the revised thesis.

The examiners need to respond specifically to the observations of the earlier examiners and the changes made by the student before re-submission.

15.5 After the recommendations of the D.S.C.(either for acceptance of the thesis for the Ph.D. degree or for its rejection/ modification) have been accepted by the Senate (or its Chairman on its behalf) a copy of the reports of the examiners may be issued to the candidate at his request. However, the names of the examiners are not to be disclosed.

15.6 Once the reports of the examiners have been accepted as satisfactory, the candidate will have to defend the thesis before a viva voce board consisting of all D.S.C. members and an 'external' examiner. The defense will be open where faculty members and students of the parent as well as other departments will be invited. The evaluation, however, will be done by the DSC along with the external examiner. The 'external' examiner may either be one of the experts who have already adjudicated the thesis or be another expert appointed for the purpose. The viva voce board may recommend changes in the thesis.

If the viva voce board is not satisfied, the candidate has to appear again before the board after elapse of three months. The D.S.C. shall recommend to the Senate the award of the Ph.D. degree if the viva voce is satisfactory and all other requirements have been fulfilled.

15.7 On completion of the viva voce, the student will submit two copies of the revised thesis and two copies in electronic media, which, will be archived in Institute and Departmental Libraries. All available copies of the original version will be returned to the student. The copies available with the student and his supervisor(s) must also be corrected.

15.8 Forms AC/318 – 320 and AC/322 - 325 shall be used by the departments for recording various recommendations of the committees and decisions of academic authorities.

16. Award of Degree

16.1 On the recommendation of the Doctoral Scrutiny Committee, the Senate or the Chairman, Senate (when the Senate is not sitting early) shall decide whether the candidate should be awarded the degree of Doctor of Philosophy. If the Chairman, Senate has approved the award of degree the award must be confirmed by the Senate.

16.2 Normally a student will be awarded Ph.D. degree in the branch of study in which he is enrolled. But in exceptional cases, the DSC may recommend to the Senate to award the degree in another branch depending on the contents of the thesis. This can be done at the time of provisional-registration (preferred), Registration or even after the thesis is submitted.

16.3 A provisional certificate may be issued to the student on approval of the Director. The final degree certificate will be issued in the convocation or by any other mode approved by the Senate.

17. QUALITY IMPROVEMENT PROGRAMME (QIP)

The QIP is a programme of the Government of India administered through the All India Council for Technical Education. The programme covers education of engineering college teachers for M. Tech and Ph.D degrees.

17.1 The studentship programme under the QIP will be administered as per the rules set by the AICTE.

17.2 The students admitted under the QIP will be treated at par with the regular students of the Institute as far as their academic programme is concerned. It will be administered by the Academic Section of the Institute. The Academic section will also look after their admission, stipend and release.

17.3 The research expenses of QIP students will be met from departmental grants. 50 % of the contingency grant will be transferred to the Departmental Operating grant for maintenance of equipment and computing facilities provided to QIP students, and for research consumables. In addition, the students will use the contingency grant provided by AICTE towards travel for data collection and attending conferences, conference registration fees, procurement of books, stationery, printer cartridges, compute consumables, Xeroxing etc.

17.4 Contingency expenses incurred in one academic year must be claimed within the same year, unless approved by Dean (AA) in advance.

17.5 The travel and daily allowances of QIP students will be same as that of other sponsored students of the Institute.

17.6   All travel for data collection or presentation of papers must be approved by Dean(AA). The TA claims are to be approved by the respective Heads of the Departments/Centers and attached to contigency bills of the students.

17.7   QIP students will be entitled to casual and medical leave at par with regular students of the Institute. Casual leave will be sanctioned by the Heads of the Departments and the records will be maintained by the Departments. Medical leave will be sanctioned by Dean (AA) on the basis of recommendation of Head, Insitute Medical facility and records will be maintained by the Academic Section. Leave is not transferable to or from their parent institutions.

17.8   QIP students on the Ph.D. contact Programme will not be considered as regular students. They will, however, be permitted to use institute Library (without borrowing facilities) and departmental facilities. Academic Section will issue a temporary Identity card to these students.

17.9   If a QIP student cannot complete his academic programme before the end of his period of deputation (from his parent institution), he is required to seek withdrawal from the Institute to join his parent institution, prior to the expiry of his deputation. His request for withdrawal will be examined by his DAC and its recommendations will be forwarded to the Academic Section. The student should make arrangement for completion of his academic programme.

17.10   A QIP student will be given release order by the Asst/Deputy Registrar (AC) on completion of or taking withdrawal from the academic programme, surrendering accomodation, and clearing all dues to the Institute.

17.11   In addition to the forms used by other students, a QIP student shall use forms AC/351-360 for various activities related to QIP.

18.   Conduct and Discipline

18.1   Students shall conduct themselves within and outside the campus of the Institute in a manner befitting the students of an Institution of National standing.

18.2   Detailed rules regarding conduct and discipline are given in Appendices–IV and VI.

19.   Progress of Research Programme

The progress of the research programme of a student shall be continuously monitored by the Doctoral / Masters Scrutiny Committee. In practice, the committee will depend on inputs from the supervisors, HOD and the student. It will be the responsibility of the student to ensure that his papers remain up to date in matters of registration, course work, extension of fellowship, withdrawal and other formalities. In case of any deficiency, he should draw attention of his supervisor(s) and HOD, and if unsuccessful, that of the Dean (AA) and Director.

Although rare, sometimes there may be a breakdown of communication between a student and his supervisor due to physical distance or due to personal reasons. It shall be the responsibility of the student to bring such matters to the attention of HOD, Dean (AA) and Director. The Institute shall do the needful to establish communication or to make alternative arrangement.

20.   Termination of Studentship

The studentship of a Ph.D. student may be terminated by the Senate on exceptional grounds. They are:

1.   Recommendation of Institute's Disciplinary Committee.

2.   Poor progress as noted by the Doctoral Scrutiny Committee and Departmental Academic Committee (PG&R). Such a decision may be implemented only after approval of the Senate.

3.   Failure to do semester registration for two consecutive semesters.

4.   Prolonged absence (exceeding three months) from the Institute without sanctioned leave or withdrawal.

21.   Transition issues

These regulations shall come into effect from AY 2007-08 Autumn Semester. Students enrolled prior to this date shall also be covered under these regulations, except when the implementation of these regulations leads to

obvious anomalies and serious hardship to the students. The final decision on each specific issue will be taken by the Senate (or Chairman Senate on its behalf) on case-to-case basis.

22.   **Dissemination of information**

22.1   A copy of this document shall ordinarily be given in print or electronic form to every M.Tech student on admission to NIT Rourkela. It will also be made available on the Institute's web site. Not possessing a copy, however, shall not exempt a student from complying with these regulations.

22.2   The Assistant/Deputy Registrar (Acad) is authorized by the Institute to issue formal certificates of studentship [Form AC/115] and Expenditure Certificate [Form AC/116]. Dean (AA) will sign all certificates of studentship on behalf of the Director when external agencies seek such certificates from Head of Institution.

22.3   On publication of final results a student will be issued a provisional certificate on Form AC/127 and a Institute leaving cum migration cum conduct certificate on Form AC/126. Form AC/127 will be signed by Dean (AA) on behalf of the Director, while Form AC/126 will be signed by Dean (SA). The final degree certificate will be signed by Registrar, Director and Chairman, Board of Governors.

23.   **Exceptions**

Notwithstanding anything stated in the rules, the Senate can make special provisions and exceptions depending on the merit of a case. Such cases shall not be cited as precedence in future occasions of similar nature, because two situations appearing similar may not be identical.

In emergency situations, the Director in capacity of the Chairman Senate, can exercise powers of the Senate and discharge the functions of the Senate. Such decisions must be reported to the Senate at its next meeting.

**REGULATIONS
FOR**

**DEGREE OF DOCTOR OF SCIENCE
(D.Sc.)**

(EFFECTIVE FROM ACADEMIC SESSION 2007-08)

**NATIONAL INSTITUTE OF TECHNOLOGY
ROURKELA**

C O N T E N T S

1. General

1.1 The Institute shall have provision for award of the degree of Doctor of Science (D.Sc.). This degree will be awarded in recognition of original scholastic work at a level far above that of a Ph.D. degree.

1.2 The D.Sc. degree will be awarded to a candidate who is found eligible on the basis of a thesis or published papers based on his own original research work in an appropriate field. The award shall be made by the Board of Governors on the recommendation of the Senate.

2. Eligibility

2.1 Ordinarily a candidate who has obtained a Ph.D. or an equivalent degree from a recognised institution shall be eligible to appply for registration for the D.Sc. degree. The Senate may also permit a candidate possessing either a Master of Technology degree or an equivalent degree, Bachelor of Technology or Master of Science degree or a degree equivalent to anyone of them, to register for the degree of Doctor of Science, if the candidate has demonstrated exceptional academic achievement.

2.2 An applicant for registration must either be at present a member of faculty of the Institute, must have been in service in the Institute as a faculty member, or must have performed the major portion of his work in the Institute's laboratories.

3. Application Procedure

3.1 An intending candidate shall submit his application for registration on plain paper enclosing therewith (a) his bio-data complete with qualifications, teaching and research experience (b)list of research papers published and (c) an outline of the research work on the basis of which¬ the permission is sought for. The application should be accompanied by the prescribed fee [Rs. 1000.00] and be addressed to the Director through Dean (AA). The Director will refer it to the Head of the Department which the subject relates to for a preliminary scrutiny and for suggesting names of members for constitution of a Doctoral Scrutiny Committee (D.S.C.) in accordance with provisions of para 3.2 below.

3.2 The composition of the Doctoral Scrutiny Committee shall be as follows:

1 The Director ... Chairman(Ex-officio)

2. The Dean of Academic Affairs.

3. The Head of the Department to which the research area of the applicant belongs.

4. Three senior members of faculty from related areas, nominated by the Senate or Chairman Senate on its behalf.

5. One external expert of high academic standing nominated by the Senate or Chairman Senate on its behalf.

3.3 The candidate will present an open seminar on his topic of interest in presence of the doctoral scrutiny committee. The seminar will cover the theme of the research topic, the work already done and the work intended to be carried out. The research methodology and the expected outcome will be enumerated.

3.4 The D.S.C., on being satisfied of the candidate's eligibility for the D.Sc. degree as well as the expected quality of the proposed research work, shall recommend to the Senate for his registration.

3.5 The registration shall be valid for a period of five years from the date it is granted.

4. Synopsis

4.1 A candidate who has been registered shall be required to submit five copies of synopsis of his work within the valid period of registration and three months before the expected date of submission of thesis. The synopsis should be furnished in soft¬ - bound form. The synopsis shall contain a list of publications originating from the material to be presented in the thesis, the impact factors of the journals in which the papers were published and list of citations of each of the papers as available from standard international sources.

4.2   The Doctoral Scrutiny Committee will examine the synopsis, the papers to be included, the impact factors of the journals where the papers are published and the list of citations. The candidate will be requested to present an open seminar on the subject. Every member of the Committee will give separate written reports on the proposed contents of the thesis. Then sitting together, the committee will decide if the contents satisfy, prima facie, the requirements of the D.Sc degree.

4.3   If satisfied, the student will be permitted to prepare the formal thesis. The Doctoral Scrutiny Committee will also recommend a panel of 10 experts of international repute (five from India and five from abroad), for appointment as examiners of the thesis.

4.4   If the Committee is not satisfied on the merit of the work, the candidate will be informed in writing. The candidate can re-request and submit a proposal after the lapse of 2 years, but within the five year registration period.

4.5   The Director, as Chairman of the Senate will select four examiners from the panel, two from India and two from abroad.

5.   Thesis

5.1   Within a period of three months of the date of submission of the synopsis the candidate shall submit five soft-bound copies of his thesis together with a thesis evaluation fee [Appendix V]. It is desirable that at least the important parts of the thesis have been published either as a book or as articles in journals of international standard. If the supplication for the degree is based only on already published research papers, copies/reprints thereof should be bound together in the form of a thesis giving appropriate references. The thesis shall be a record of candidate's own independent and original research in Engineering, Science or Technology. It shall accompany a declaration signed by him that the work has been done and the thesis prepared by him for the D.Sc. degree of the Institute and that it has not been submitted for any degree or diploma either at NIT Rourkela or in any other Institute or University.

The thesis shall also include the following: ¬

(i)   A brief bio-data of the candidate (Name, Age, Educational qualifications, Research Experience and Permanent Address).

(ii)   A summary of the thesis and about 20 key words.

(iii)   A list of published papers with impact factor of the journals and a list of citations of each paper as available from standard international sources.

6.   Evaluation

6.1   The thesis shall be referred to four experts chosen by the Director from the panel prepared (vide para 4.3 above) to examine the thesis. Each expert will independently forward his report in a prescribed form along with detailed comments.

6.2   The report of all the examiners shall be placed before the D.S.C. for consideration. If the examiners are unanimous and unequivocally favorable the committee will recommend to the Senate that the thesis be accepted for the degree.

6.3   Ordinarily, a candidate for the D.Sc. degree shall not be required to appear at a viva voce examination unless one of the examiners makes a special recommendation to that effect, like clarifications of some points at the time of viva voce. If there is need of a viva voce, one of the two Indian examiners will be invited to join the D.S.C. in conducting the oral examination.

6.4   If the Senate is satisfied with the reports of the examiners and the recommendations of the D.S.C., it will recommend to the Board of Governors for award of the degree.

6.5   If two of the examiners recommend for award of the degree of Doctor of Science and the Others recommend that the thesis be accepted for a lower degree, the Doctoral Scrutiny Committee may, after obtaining a written consent from the candidate that he is agreeable to be considered for the degree of Doctor of Philosophy, make its own recommendations to the Senate on the proposition. In such a case, it shall be necessary for the candidate to appear at a viva-voce examination by a Board to be constituted for the purpose.

6.6 On completion of the evaluation process, the proposal will be put up to the Senate for recommendation and, if the recommendation is favourable, the proposal will be put up to the BOG for approval. The degree shall be awarded in the convocation.

6.7 On completion of the evaluation process, the candidate shall submit 2 copies of the thesis in a properly bound form with two more copies in electronic media (PDF files). The thesis will be archived in the Institute's Central Library and concerned departmental library.

7. Exceptions

7.1 Notwithstanding anything stated in the rules, the Senate can make special provisions and exceptions depending on the merit of a case. Such cases shall not be cited as precedence in future occasions of similar nature.

7.2 In emergency situations, the Director in capacity of the Chairman Senate, can exercise powers of the Senate and discharge the functions of the Senate. Such decisions must be reported to the Senate at its next meeting.

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REGULATIONS
FOR

POST-DOCTORAL FELLOWSHIP
AND
RESEARCH ASSOCIATESHIP

(EFFECTIVE FROM ACADEMIC SESSION 2007-08)

NATIONAL INSTITUTE OF TECHNOLOGY
ROURKELA

C O N T E N T S

1. Introduction

The Institute may award Post-doctoral fellowships with a view to provide an opportunity to competent researchers to do independent research work in an appropriate area. The fellow may have designation of "Post doctoral fellow" or "Research Associate" depending on the nomenclature of the funding authorities.

The rules embodied in this Regulation shall apply to all categories of Post doctoral fellows working in the Institute including those supported by AICTE, UGC, CSIR, other Government /Private agencies and by sponsored research projects.

2. Eligibility

2.1 Post doctoral fellowships are intended for persons ordinarily below the age of 40 years who have obtained a doctorate degree and have had published research work to their credit. In special cases, persons with M.Tech. degree, a superior academic record and at least 3 years of R&D experience may be considered for "Research Associateship", if allowed by funding agencies.

2.2 Post Doctoral fellowship may also be awarded provisionally to candidates who have submitted Ph.D. thesis. In such cases the student may be given fellowship at 50% of normal rate, the balance being paid as arrear on award of the degree. If the candidate does not receive Ph.D. degree within 1 year of joining, the award should be withdrawn. There shall neither be recovery of the fellowship paid, nor payment of stipend beyond the 50% already paid.

3. Selection

3.1 The selection of post doctoral fellows will be made on the recommendations of a Selection Committee consisting of the following members:

1. The Director ... Chairman

2. The Dean of Academic Affairs

3. The Head of the Department in which a candidate intends to carry out research work.

4. Two members of faculty having expertise on the line of research work intended.

3.2 A candidate will be required to appear for an interview before the Selection Committee. The Institute will pay the candidate single sleeper class rail fare each way by the shortest route for the journey in connection with the interview.

4. Tenure

4.1 The fellowship awarded to a research worker shall be, in the first instance, tenable for one year counted from the date of joining.

4.2 The tenure can be extended on consideration of the research work carried out in the preceding year by an Assessment Committee consisting of the following members:

1. Director or his nominee   (Chairman)

2. The Dean of Academic Affairs

3. Head of the Department concerned

4. The faculty member with whom the Research Associate is associated.

The extention will be for a total period three years including the year of joining, but not more than one year at a time.

4.3 The Institute may terminate the fellowship of a person at any time on the basis of a report from the Head of the Department for reasons of unsatisfactory performance; in the cases of fellows of CSIR/UGC/R&D Projects the report will have to be from the associated faculty/Principal Investigator. A fellow may discontinue the fellowship and leave the Institute before the end of the tenure with prior approval of the appropriate authority.

5.   **Emoluments**

5.1   Post doctoral fellowships will be as per the norms set by MHRD or a national agency such as AICTE, DST, CSIR or UGC.

5.2   The monthly emolument offered to a candidate shall be fixed for the one year tenure in one of the above groups and there will be no Dearness Allowance or any other allowances like HRA, CCA etc, unless specifically approved by the sponsors.

6.   **Work Assignments**

6.1   The post doctoral fellow will be attached to a Senior Faculty member and be required to devote himself to full time research in an area approved by the member of faculty concerned.

6.2   He shall not accept or hold any appointment, paid or otherwise or receive any emoluments, salary, stipend etc. from any other sources during the tenure of the award.

6.3   The fellow shall present, through the faculty member of the Department with whom he has been working, an annual comprehensive report on the progress of his work for purpose of assessment.

6.4   The Head of the Department may assign to a Post doctoral fellow academic responsibilities (like lecture, tutorial or laboratory classes, conduct of seminar / symposia, running and maintenance of equipment/computer etc.), not exceeding 8 hours per week.

7.   **Other Facilities**

7.1   **(A) Accommodation**

7.1.1   Post doctoral fellows may be provided with accommodation subject to availability, in Halls of Residence with monthly rental charges applicable to research scholars.

7.1.2   While residing in a Hall of Residence, the fellow shall-abide by the rules relating to Residential accommodation as in force for the Institute Research Scholars, and shall also be liable to pay the Institute water charges and Hall Establishment charges levied by the Warden.

7.2   **(B) Leave**

7.2.1   A post doctoral fellow may be granted following kinds of leave with full emoluments during each one year tenure:

   i)   Casual Leave   : 15 days

   ii)   Medical Leave, on the recommendation   : 15 days
         of the Institute doctor.

   Any leave not availed of shall not accumulate. Unauthorised absence may be treated as leave without emoluments.

7.2.2   The sanctioning authority for the leave shall be the Head of the Department.

7.2.3   In addition to the above, a woman fellow may be allowed maternity leave with full emolument for a period not exceeding three months covering periods both before and after confinement.

7.2.4   In exceptional cases, post doctoral fellows, except those who are with fellowship of CSIR, UGC or under a sponsored scheme, may be allowed leave without emolument for a period not exceeding three months during the total tenure of the award on the recommendation of the Head of the Department.

7.2.5   The period of leave sanctioned under the provisions of para 7.2.4 shall be counted towards the tenure of the fellowship awarded.

7.3   **(C) Library books and Journals**

7.3.1   The post doctoral fellows shall be entitled to all Library facilities on depositing a Library Caution Money applicable to Research scholars.

7.4 **(D) Medical treatment & reimbursement**

7.4.1 A post doctoral fellow will be provided with free medical treatment in the Institute Dispensary.

7.4.2 The above mentioned facilities shall cover the members of family of the post doctoral fellow, if permitted to stay with him in the Hall of Residence.

7.5 **(E) Traveling Allowances**

7.5.1 Post doctoral fellows may be permitted on the recommendation of the Head of the Department to attend an Institutional or a national conference/ seminar in India once a year for which he will be treated on duty and shall be entitled to the payment of

i)	Traveling Allowance	-	Single AC III tier fare and/or actual bus fare from the Institute each way. If AC III tier is not available AC II tier fare may be approved by Dean(AA).
ii)	Daily Allowance	-	At the same rate per day as admissible to an Institute employee with same salary as the monthly emolument of the fellow.
iii)	Registration	-	Actual amount payable.

Post doctoral fellows may be deputed on official duty with the same TA rules as given above.

8. Exceptions

8.1 Notwithstanding anything stated in the rules, the Senate can make special provisions and exceptions depending on the merit of a case. Such cases shall not be cited as precedence in future occasions of similar nature.

8.2 In emergency situations, the Director in capacity of the Chairman Senate, can exercise powers of the Senate and discharge the functions of the Senate. Such decisions must be reported to the Senate at its next meeting.

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APPENDICES

List of Departments offering Ph.D. and M.Tech(R) programmes

A.   ENGINEERING

1.	BM	:	Biotechnology and Medical Engineering
2.	CE	:	Civil Engineering
3.	CH	:	Chemical Engineering
4.	CR	:	Ceramic Engineering
5.	CS	:	Computer Science & Engineering
6.	EC	:	Electronics and Communication Engineering
7.	EE	:	Electrical Engineering
8.	ID	:	Industrial Design
9.	ME	:	Mechanical Engineering
10.	MM	:	Metallurgical & Materials Engineering
11.	MN	:	Mining Engineering

B.   SCIENCE, HUMANITIES AND SOCIAL SCIENCES

1.	CY	:	Chemistry
2.	LS	:	Life Sciences
3.	MA	:	Mathematics
4.	SM	:	School of Management
5.	PH	:	Physics
6.	HS	:	Humanities and Social Sciences
			[Ph.D. in English, Psychology, Economics and Sociology only]

APPENDIX-II

QUALIFYING DEGREES FOR ADMISSION TO Ph.D. and M.Tech (R) PROGRAMMES

Department	Requisite Academic Qualification
Biotechnology and Medical Engineering (BM)	B.Tech in Biotechnology / Chemical / Mechanical / Electrical / Electronics / Chemical / Metallurgical / Polymer Instrumentation Engg., B.Pharm, MBBS or M.Sc in Biotechnology or Life Sciences.
Civil Engineering (CE)	B.Tech. in Civil / Mining Engineering.
Chemical Engineering (CH)	B. Tech. in Chemical / Biochemical / Biotechnology / Mining / Metallurgical / Polymer / Mechanical / Ceramic Engineering.
Ceramic Engineering (CR)	B.Tech in Ceramic / Metallurgy / Chemical / Mechanical Engg. or M.Sc in Physics / Chemistry / Material 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, Life Sciences or B.Tech. in Chemical / Ceramic / Metallurgical and Materials Engg.
Electronics & Communication Engg. (EC)	B. Tech. in Electronics / Electrical Engg.
Electrical Engineering (EE)	B.Tech.in Electronics / Electrical & Electronics/ Electronics & Communication / Electrical Engg.
Humanities and Social Sciences (HS)	M.Sc. / MA in relevant subjects ; B.Tech. in any branch of engineering.
Industrial Design (ID)	B.Des. with any specialization, B.Tech. in Mechanical Engineering, Manufacturing Science or Instrumental Engineering
Life Sciences (LS)	M.Sc, in Life Sciences or Biotechnology, MBBS, BVSc., B.Pharm or B.Tech. in Biotechnology
Mechanical Engineering (ME)	B. Tech. in Mechanical / Automobile / Biomedical / Aeronautical / Production / Manufacturing / Industrial / Metallurgy or Material / Polymer / Chemical Engg
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 Engg. (MN)	B.Tech. in Mining or in any other branch of Engineering or M.Sc. in Geology / Geophysics / Physics / Chemistry.
School of Management (SM)	Masters degree in Management Studies or Industrial Design.
Physics (PH)	M.Sc. in Physics, Chemistry or B.Tech. in Metallurgy and Materials Engg.

Note : 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.

APPENDIX-III

GUIDELINES FOR USE OF PROJECT RECORD BOOK

1.   The Project Record Book constitutes the bona fide record of project work carried out by undergraduate, postgraduate and research students of NIT Rourkela.

2.   The book contains day to day record of all conceptual, analytical, laboratory and computational activities carried out by a student as a part of his project.

3.   It is a permanent record of academic activity and contains intellectual property created by the student and his supervisor.

4.   The book should be treated with respect and maintained with care. Pages must not be torn or used for rough work.

5.   The student should record all his thoughts, observations, flow charts, computational steps etc., directly on this notebook. Use of second rough book and final copying to this record book is discouraged.

6.   All information recorded here must start with a date on the left margin. The work of the day must be organized into sections such as objective, experimental or computational methods, observations, program flow charts, pseudo-codes, conclusion, discussion etc., as relevant to the problem at hand. Short computer prints, photographs, charts and graphs may be pasted neatly wherever necessary.

7.   The supervisor should examine the progress of the student and record his observations, comments and suggestions in a regular manner, typically once every week.

8.   The student must produce this record book before all Examination Boards for evaluation and grading of his day to day performance, and for award of medals and prizes. The first evaluation of the project will be made basing on the record book only.

9.   On completion of the project, the student must surrender this book to his supervisor for archiving. If the same problem is continued by students of the following batch, the supervisor may choose to give it to those students for the sake of continuity. Projects with supervisor intellectual material may be sent to Departmental Library for permanent archival.

10.   The students who do work worth publishing and/or patenting are advised to proceed with those activities. The IPR Cell of the Institute will organize the patenting process.

11.   All research students shall be provided with Project Record books as per need with no limit on the number of books used. Blank books shall be provided by the Department Office or by the Academic Section.

APPENDIX-IV

<u>RULES REGARDING CONDUCT AND DISCIPLINE</u>

Following rules shall be in force to govern the conduct and discipline of all students:

1. Students shall show due respect to the teachers of the Institute, the Wardens of the Halls of Residence, the Sports Officers and the Officers of the National Cadet Crops; proper courtesy and consideration should also be extended to the employees of the Institute and of the Halls of Residence. They shall also pay due attention and courtesy to visitors.

2. Students are required to develop a friendly relationship with fellow students. In particular, they are expected to show kindness and consideration to the new students admitted to the Institute every year. Law bans ragging in any form to any body. Any act of physical or mental pressurization of junior students, individually or in group, will be considered as an act of ragging. Ragging also includes forcing junior students to meet seniors outside institute premises, or in places where a student has no valid reason to be present, asking irrelevant questions or using abusive language. Ragging will be considered as gross indiscipline and will be severely dealt with, which may include expulsion from the institute.

   If a junior student yields to any form of ragging by senior students and does not inform the Institute or hall authorities, or willfully withholds the information in an enquiry of ragging incident, the matter will be treated as indiscipline on the part of the junior student and invite punishment comparable to those against ragging itself. Willful withholding of complaint by a junior student does not automatically exempt a senior from punishment.

3. The following acts of omission and/or commission shall constitute gross violation of the code of conduct and are liable to invoke disciplinary measures:

   • Furnishing false statement of any kind in the form of application for admission or for award of scholarship or prizes etc.

   • Furnishing false statement to the Disciplinary Committee, or willfully withholding information relevant to an enquiry.

   • Organizing or participating in any activity that has potential for driving fellow students along lines of religion, caste, home state, batch of admission, hall of residence or any other unhealthy criterion.

   • Physical or mental harassment of freshers through physical contact or oral abuse.

   • Getting involved in a brawl or fight with persons outside the Institute, either alone or in a group, irrespective of who initiated the conflict.

   • Willfully damaging or stealthily removing any property belongings of the Institute, Hall or fellow students.

   • Adoption of unfair means in the examinations.

   • Possession, consumption or distribution of alcoholic drinks or any kind of hallucinogenic drugs.

   • Organizing or participating in any group activity except purely academic and scientific programmes in company with others in or outside the campus without prior permission of the Dean of Students' Affairs.

   • Mutilation or unauthorized possession of library books.

   • Displaying lack of courtesy and decorum, resorting to indecent behaviour any where within or outside the campus.

   • Resorting to noisy and unseemly behaviour, disturbing studies of fellow students.

   • Not intimating his/her absence to the Warden of the hall before leaving campus.

4. Commensurate with the gravity of the offence, the punishment may be

   I. Reprimand,

   II. Additional work in the institute,

   III. Debarment from student activities and elections and captaincy of sports teams,

   IV. Debarment from medals and prizes,

   V. Partial (one month or one semester) or complete debarment from campus placement,

   VI. Reduction in grade in one or more courses,

   VII. Expulsion from the Hall of Residence,

   VIII. Rustication for a specified period, or

   IX. Outright expulsion from the Institute.

   Punishments under items (v) to (ix) will constitute "Major Punishments" and will debar a student from all academic medals and prizes, as well as important non-academic awards.

   In addition, for economic offences (either misappropriation of money or damage to Institute property), the cost to the Institute will be recovered along with a penalty which may be up to ten times of the cost recovered.

5. For an offence committed (a) in a Hall of Residence, (b) in the Department or a class room and (c) elsewhere, the Warden, the Head of the Department and the Dean of Students' Affairs, respectively, shall have the authority to reprimand or impose fine or take any other suitable measure. All cases involving punishment other than reprimand shall be reported to the Chairman of the Standing Disciplinary Committee.

6. (a) All major acts of indiscipline, which may have serious repercussion on the students in general and/or which may warrant a uniform and more formalized nature of investigation, shall be handled by the Standing Institute Disciplinary Committee appointed by Senate. The standing Disciplinary Committee consists of the following ex-officio and other members:

      1. Dean of Student Affairs-Chairman

      2. Chief Warden of Halls of Residence-Member

      3. Wardens of the Halls of Residenceof the concerned students-Member

      4. Two members of faculty nominated by the Senate, for a period of two years-Member

      5. Two senior students nominated by the Director for a period of one year-Member

      6. Deputy / Assistant Registrar (Academic)-Member Secretary

   (b) The standing Disciplinary Committee shall investigate complaints, examine available evidence and award punishment.

   (c) Recommendation of the committee, which will include the suggested punishment in cases of guilt proven, will be forwarded to the Chairman, Senate for necessary action.

   (d) Proof of guilt need not necessarily be at the same level as necessary in a court of law. The committee, in order to protect the academic rights of a greater body of students, may award disciplinary measures if it is reasonably satisfied that such measures are in the greater interest of the students.

   (e) The Director, at his discretion may take additional measures keeping in mind long term issues and impact on other aspects of Institute management. The Director in capacity of Chairman, Senate may make minor changes in the nature of punishment awarded or reduce the level (as per item 4 above) and/or quantum of punishment if he feels appropriate. But he shall not increase the quantum of punishment awarded.

(f)   On approval of Director, the Deputy / Assistant Registrar (Academic) will bring out appropriate orders with copies to the parents / guardians of the student.

(g)   If the Director feels that the nature and/or quantum of punishment is not commensurate with the offence and may create long term problems, he may refer the matter to the full Senate. The Senate's decision in the matter will be final.

7.   Acts which may be classed as 'crimes' rather than acts of indiscipline will be reported to the state authorities; they include such acts as causing serious injury to fellow students or others, causing major damage to Institute property, being involved in activities prejudicial to national security or to that maintaining communal harmony etc.

8.   Cases of adoption of unfair means in an examination shall be dealt with by the Examination Disciplinary Committee consisting of the following members:

(1)   A Senior Professor, nominated by the Senate   -   Chairman

(2)   The concerned examiner(s) & the faculty
reporting the incident   -   Members

(3 & 4) Two members of faculty nominated by the
Senate for a term of two years   -   Members

(5)   Professor in charge Examinations   -   Secretary

If adoption of unfair means is proved, the punishment may be, depending on the quantum of the offence and prior record, reduction of grade, de-registration of a course, expulsion for one or more semesters or outright expulsion from the Institute.

The Committee shall recommend appropriate measures in each case to the Chairman of the Senate for awarding the punishment.

9.   Any act of indiscipline in a hall will be investigated by a Hall Disciplinary Committee which will recommend the action to the Superintendent, Halls of Residence, who will decide the course of action to be taken and implement it. However, in case the matter is in serious nature, the Superintendent will forward it to the Dean (SA) through Warden, Hall. The Dean (SA) who is the Chairman of the standing Institute Disciplinary Committee may take necessary action. The Hall Disciplinary Committee consists of the following members:

(i)   Assistant Warden   -   Chairman

(ii)   General Secretary   -   Member

(iii)   One boarder of the hall to be nominated by the   -   Member
Chief Warden of Halls in consultation with the
Warden

10.   Any act of the indiscipline and steps taken by the Director will be reported to the Senate in its next meeting. If opportunity still exists, the Senate may deliberate and alter the nature and/or quantum of punishment awarded.

11.   A punishment, once awarded and notified cannot be changed by the Director, the Standing Disciplinary Committee, or any administrative authority. However, when new facts come to light, the Senate can amend the punishment and take any other corrective measures that it feels appropriate.

12.   Ordinarily minor disciplinary offences and punishments will not be reflected in a students' Conduct Certificate. But in serious cases, Disciplinary Committee the Director or the Senate may decide to enter an appropriate entry in the students' Conduct Certificate.

FEE STRUCTURE FOR B.Tech/M.Tech./M.Sc./Ph.D./ M.Tech.(Res.) Courses

Sl.No.	Fee	Amount		
		B.Tech.	M.Tech/M.Sc.	Ph.D/M.Tech(R)
1.	Admission fee (one time fee)	Rs.1000/-	Rs.1000/-	Rs.1000/-
2.	Tuition fee (per annum)	Rs.12000/-	Rs.7500/-	Rs.5000/-
3.	Other fees (Exam., Library. etc.) (per annum)	Rs.4000/-	Rs.4000/-	Rs.4000/- (at the time of submitting thesis)
4.	Institute Development Contribution. (One time fee – to be directly deposited into corpus fund at the time of admission)	Rs.10000/-	Rs.5000/-	Nil
5.	Student Activity fee (per annum)	Rs.1000/-	Rs.1000/-	Rs.1000/-
6.	Medical & insurance fees (per annum)	Rs.1000/-	Rs.1000/-	Rs.1000/-
7.	Hostel admission fee (one time fee)	Rs.500/-	Rs.500/-	Rs.500/-
8(a)	Hostel seat rent (per annum)			
	Single seated	Rs.5000/-	Rs.5000/-	Rs.5000/-
	Double seated	Rs.4000/-	Rs.4000/-	Rs.4000/-
	Four seated	Rs.3000/-	Rs.3000/-	Rs.3000/-
	Family Accommodation	-	-	Rs. 6000/- or 8000/-
8(b)	Permitted to stay outside due to shortage of rooms	Fees appropriate to the hall to which attached		
9.	Souvenir fee in pre final semester	Rs.500/-	Rs.500/-	Nil
10.	Alumni fee in final semester or at the time of submission thesis	Rs.500/-	Rs.500/-	Rs.500/-
11.	Caution Money (one time fee, refundable)	Rs.5000/-	Rs.5000/-	Nil
12.	Book Fee (per annum)	Rs.2000/-	Nil	Nil

MISCELLANEOUS FEES

Grade Cards and Certificates (Original)	NIL
Grade Cards and Certificates except degree certificate (Duplicate)	Rs. 500/-
Duplicate Certificate to correct errors	NIL
Degree Certificate (Duplicate) with Police FIR and Affidavit	Rs. 2000/-
Duplicate Identity Card	Rs. 500/-
Duplicate Health Card	Rs. 100/-
Delayed Registration (up to one week)	Rs.500/-
Delayed Registration (exceeding one week)	Rs. 2000/-
Official transcripts for students (one time payment)	Rs. 500/-
Official transcripts for Alumni (per institution) (Subject to a minimum fee of Rs.500/-)	Rs. 200/-
Fees for summer courses (per courses)	Rs. 2000/-
Alternative mid-sem or supplementary exam (per course)	Rs. 500/-
Fees for mid term TC	Rs. 1000/-
Miscellaneous services (each service)	Rs. 500/-

Note:

1) Tuition fee and all other Fees except the one time fees will be collected in two equal installments.

2) SC/ST students taking admission in all postgraduate and research Programme are exempted from paying tuition fee.

3) Students permitted provided family accommodation in Institute quarters (if any) will be attached to Hall or Ladies Hall. They will pay seat rent at the higher rate of Hall-1.

4) Hostel seat rent (except that for family accommodation) includes electricity charges upto 50 units per student per month, average. Excess consumption will be billed extra, uniformly.

5) Tuition fees and Development fees can be borne by research projects in case of students of all categories, if the student's research activity has a bearing on the project to every student in a hall.

6) Medical & insurance fee will entitle the student to free treatment and medicines at the Institute dispensary, plus insurance cover against hospitalization. It also provides insurance cover against other (non-medical) losses as per contract between the Institute and the insurance company.

7) Students are required to pay fees during all the semesters (or part thereof) they are in the roll of the Institute, from admission till thesis submission.

8) Institute employees enrolled in M.Tech.(Res.) or Ph.D. programme are exempted from all fees except Admission fee, Examination fee and Alumni fee.

9) Foreign students coming under different schemes will pay tuition fee at a rate fixed under the scheme, instead of the rate given above.

10) Ph. D., M.Tech.(R) and M.Tech. students who are granted withdrawal are exempted from paying fees under Sl. Nos. 6 and 8 (a & b) above.

11) A student permitted to stay outside the halls at his own request shall pay full seat rent for the hall he is attached to.

12) Alumni fees will be utilised by the institute for promotion of alumni activities or handed over to alumni associations for purposes approved by the Director.

13) The seat rent chargeable to students who have taken withdrawal during short term visit to the institute shall be 10 % of annual rent for each month (30 days) or part there of.

14) When persons other than students are given hostel accommodation, they will pay seat rent at the same rate, but on 6 monthly basis, payable at entry, in January and in July, irrespective of their date of entry. Every payment amount shall be 50% of annual seat rent.

15) Candidates for D.Sc. degree will pay thesis evaluation fee equal to that for Ph.D. students.

16) B.Tech. students will be given coupons to buy books of their choice against the book fee paid at the beginning of every semester.

CONDUCT RULES FOR RESIDENTS OF HALLS OF RESIDENCE

Following are the detailed rules governing residence requirements of students:

1.   The NIT, Rourkela is a totally residential institution and all students are required to stay in one of the Halls of Residence.

2.   Under special circumstances, the Director or Dean (AA) may permit a student to reside with his/her Parent/Guardian in the Institute Campus or within a reasonable distance from the Institute. Such a student shall, however, be attached to a Hall of Residence and will be required full seat rent and certain other to pay dues as decided by the Warden of the Hall. However, this permission may be withdrawn at the discretion of the Institute, at any time considered appropriate without assigning any reason. If the Institute does not have enough accommodation for all students, the Director may waive payment of full seat rent.

3.   The mess of each Hall of Residence shall function as a single integrated unit and shall not, under any circumstances be sub-divided into any kind of groups or sub-groups.

4.   The allotment of rooms in a Hall should be directed towards integration of students of different courses, batches, residential districts and communities. Wardens may reshuffle allotment in the middle of a year if this objective is not met adequately.

5.   Married student accommodation may be available only to married students of Ph.D. and M.Tech(R) programmes, if the spouse of the student lives continuously with the student. It will, ordinarily, not be provided whose spouses live elsewhere and visit the student intermittently. Other dependents such as parents, sibling or relatives are not permitted to stay in married student accommodation provided by the Institute.

6.   No student shall come into or give up the assigned accommodation in any Hall of Residence without prior permission of Dean(AA).

7.   A student shall reside in a room allotted to him/her and may shift to any other room only under the direction/permission of the respective Warden of the Hall. Mutual interchange of room without consent of the Warden is forbidden.

8.   Students shall be required to make their rooms available whenever required for inspection, repairs, maintenance or disinfecting and shall vacate the rooms when leaving for the vacations/holidays.

9.   Students shall be responsible for the proper care of the doors, windows, furniture, fan, and other fittings in the rooms allotted to them and shall generally assist the Warden in ensuring proper use, care and security of those provided in the Halls of common use of all students.

10. Students will be responsible for the safe keeping of their own property. In the event of loss of any personal property of a student due to theft, fire or any other cause the Institute shall accept no responsibility and shall not be liable for payment of any compensation.

11. Engaging personal attendants, keeping pets and use of appliances like electric heater, refrigerator etc. by a student in the Hall of Residence are prohibited.

12. Consumption of tobacco, alcoholic drinks and hallucinogenic substances is strictly forbidden.

13. Students must honour the timing of the hostels in matters of moving in or out of halls and meal times.

14. The Halls have an autonomous management system based on student participation. Every student must make an effort to participate in hall management and other welfare activity within the hall.

15. Use of motorcycles, mopeds or automobiles is not permitted in the halls. Except for truly exceptional reasons approved by the Director.

APPENDIX-VII

COMPOSITION OF DEPARTMENTAL ACADEMIC COMMITTEE (PG & R)

The following are the members of the Committee:

i)	A senior member of the faculty nominated by the Head of the Department	-	Chairman
ii)	Six faculty members selected by the HOD on rotation basis.	-	Members

Membership will be limited to regular faculty members in the rank of Assistant Professor or Professor with or without a Ph.D. degree and two Lecturers with a Ph.D. degree. The HOD shall ensure that all academic groups of a department are well represented.

A teacher who is enrolled for a degree at the Institute or outside cannot be a member of the DAC.

The Committee shall be reconstituted at the beginning of every academic session.

The functions of the Committee are as follows:

This Committee will have two different functions: one related to Postgraduate studies and the other related to Research Activities leading to Ph.D. degree. The functions related to the Ph.D. programme are given below.

1. To conduct the process of selection of the research scholars according to Ph.D. regulations, and recommend candidates for admission.

2. To recommend the deserving cases for Institute scholarship.

3. To recommend supervisors for the Ph.D. candidates.

4. To constitute Doctoral Scrutiny Committees.

5. To continuously monitor the progress of work of all enrolled Ph. D. students and to recommend remedial measures for poor performance, if any.

6. To decide on special issues, such as exemption of residence requirement, allocation of supervisor on retirement or long leave of Principal supervisor etc., in consultation with Doctoral Scrutiny Committees.

7. Any other duty assigned by the Senate or the HOD related to the Institute's research programme.

APPENDIX-VIII

COMPOSITION OF RESEARCH PROGRAMME AND EVALUATION COMMITTEE(RPEC)

1.	Dean of Academic Affairs	-	Chairman
2.	Dean of Student's Affairs	-	Member
3.	Four Senate Members to be nominated by the Senate, for a period of two years by rotation. Two members will be inducted during alternate years.	-	Members
4.	Heads of the Depts. concerned to be co-opted, whenever necessary	-	Member
5.	Deputy Registrar/Asst. Registrar (Academic)	-	Member Secretary

Functions:

(i)   To suggest the norms of admission of scholars to various research programmes leading to D.Sc., Ph.D., M.Tech.(Res) degrees of the Institute.

(ii)   To scrutinize and recommend on the proposals of the Departmental Committees for Postgraduates Studies & Research, in respect of offering research scholarships, fellowships and associateships.

(iii)   To recommend draft regulations pertaining to academic and residential requirements for research programmes leading to D.Sc., Ph.D., M.Tech.(Res) degrees.

(iv)   To scrutinize and recommend on the proposals of Doctoral and Masters Scrutiny Committees in respectof registration, progress and continuance of research programmes for individual scholars, and award of degrees on the basis of adjudication of thesis and viva voce.

(v)   To ensure that all norms of academic and residential requirements for each research scholar/fellow are strictly followed.

(vi)   To advise the Doctoral and Masters Scrutiny Committees on any matter relating to the research programmes of the students.

(vii)   To examine any proposal for a student of M.Tech. (Res) programme to be shifted to Ph.D. Programme and vice versa.

(viii) To examine and recommend cases of advancement of thesis submission proposed by DSC.'

(ix)   To recommend to the Senate the award of the doctoral degree on the basis of academic norms and regulations laid down for the purpose.

(x)   Frequency of the Meetings : Before every Senate Meeting

Any other function assigned by the Senate or by the Director on behalf of the Senate.

RULES REGARDING ENDOWMENT MEDALS & PRIZES

The Institute awards medals and cash prizes to the eligible continuing and graduating students for excellence in academic or extra academic activities. Some of the medals are funded by the Institute, while some are given by donors such as parents of deceased students, Government, Organisations and individuals. These medals and prizes are awarded to graduating students in the Annual Convocation and to continuing students on Institute day. It is decided that the medals and cash awards will be given according to the following rules : -

1.   Gold Medals :

A Gold Medal awarded by the Institute will be of 10 gm standard weight at current rate, will cost around Rs.10,000/-. Minimum capital to be given by the donor as principal will be of Rs.2.00 lakhs. Existing donations of lower capital will be converted to cash prizes. The minimum value of cash prize shall be Rs. 5000/-, except for those awards which are given in memory of deceased students.

2.   Memory of Past students:

Some awards are given by parents or friends in memory of deceased students of the Institute. The criteria for giving such endowments is as follows : -

    a)   Gold Medal : as per clause 1.

    b)   Cash Award : 5% of endowment or Rs.1000/- whichever is higher.
    These awards will be continued even if the interest from the principal falls below the cost. In case of deficiency, donors will be requested to increase the amount of endowment but if they either do not exist or one not in a position to contribute more funds, the Institute will bear the difference in expenditure in memory of its old students.

3.   Government/Institution of Engineers/Organisation donors/Individual donors:

    a)   Gold Medal : as per clause 1.

    b)   Cash Award :
    5% of endowment or Rs.5000/- whichever is higher. In case of deficiency of capital, the donors will be contacted for increasing the amount of endowment. If they are not in a position to contribute the funds required, these endowments will be discontinued after funds are exhausted. In the closing year, if Rs.5,000/- is not available, the amount will be absorbed by the endowment fund and used for covering deficiencies in the endowment given in the memory of deceased students.

4.   In all the above cases, the figures will be reviewed in July of every 5th year i.e. in July of year 2010, 2015, 2020 etc.

5.   For awarding the above prizes, an Institute Committee appointed by the Senate will decide winners a month before the Convocation or the Institute day whichever is earlier. The composition of the Committee shall be as follows :

Dean (SA)	-	Chairman
Two faculty members nominated by the Senate	-	Member
Deputy /Asst. Registrar (Acad)	-	Member

6.   For prizes based on attributes other than academic performance or SAC activity, a special committee may be constituted by Director in consultation with donors. Donors who choose to pay annually are required to pay minimum Rs.5000/- towards the endowment. They must send the cheque before September 30 of each year to sustain the endowment. If payment is not received in time, the award will be dropped for the year. Late payment will go to next year.

7.   List of prizes, method of selection and names of winners will be posted on the Institute website.

NORMS FOR ADMISSION OF SPONSORED CANDIDATES

1. The Institute may admit persons who are employed in other organisations (Institutes/ research organisations/industries) to Ph.D., M. Tech. and M. Tech. (R) programmes of any discipline.

2. Such candidate should have eligibility requirement as specified in clause 2.1 and 2.2.

3. These candidates must have a total of minimum 2 years full time experience in the sponsoring organisation. The candidates must produce evidence of their work experience in the form of appointment letter, salary slips, identity cards etc. for the satisfaction of DAC(PG&R). A simple letter from the employer will not suffice. It is the responsibility of the candidate to convince the DAC(PG & R) that he has served continuously for two years in the sponsoring organization and that it is a reported institution or industry.

4. The requirements of 2 years experience may be relaxed for personnel with permanent job (including probation) in the Central or State Govt. or an organization fully owned by the Government on request of the concerned organisation.

5. Intending sponsored candidates must submit their applications in prescribed form for admission through their employers with suitable endorsement.

6. The sponsored students normally are required to stay in the institute till completion of assigned work and submission of the thesis. However, in special cases, their residential requirement can be reduced by Chairman Senate on recommendation of the DSC/M.Sc. to six months only as mentioned in Clause 5.2, provided they do not have to complete any course work during normal semesters. Continuous periods of stay less than 2 months in duration will not be counted.

   In case of candidates from Central Government R&D Institutions, if the Department can arrange summer courses or guided self-study courses, or a candidate can attend equivalent courses in an Institute/University (not affiliated college) of repute near his place of work, the residential requirement of 6 months may be satisfied in a split mode.

7. Sponsored candidates who intend to do a part of their work in the place of employment will be assigned a joint supervisor from their place of work, the details of which are given in the regulations.

   The DAC will ensure that sufficient number of qualified and experienced scientists/engineers are employed in the parent organization, so that one of them will serve as the second supervisor. The employer may enclose a copy of the biodata of the proposed second supervisor, which will be examined by the DAC.

8. It is the responsibility of the candidates to furnish all necessary documents to convince the DAC(PG&R) on the credentials of their employer-organisation that the work (or a major part of the work) can be successfully carried out in their organisation. Annual reports of the institutes, faculty list and qualifications, publication lists and any other material that the candidate considers to be relevant may be presented.

9. On completion of a course, a sponsored student is required to join back in the sponsoring organization and serve for a minimum period equal to the number of years of study, i.e., 2 years after M.Tech(R) and 3 years after Ph.D., unless specifically released by the sponsor for a justified reason. The Institute, at its discretion, may refuse placement or admission in another programme to a student intending to return to the Institute, particularly when there is indication that the student or the sponsor has not acted in good faith. Such decisions shall be made by the Senate, or Chairman Senate on its behalf.

10. Detection of any breach of trust, submission of misleading document or concealment of information shall lead to termination of studentship at any stage of a student's tenure. In such a case fees already paid shall not be refunded.

LIST OF FORMS
(Ph.D. & M.Tech(R) programmes)

National Institute of Technology
<u>Rourkela</u>

Form : NITR/AC/301

Paste here your recent passport size colour Photograph

For Office use only

Serial Number of the Applicant : _____/_____

_____
Superintendent (Academic)

Recommendation of Departmental Academic Committee

☐ The candidate may be called for interview.

☐ The candidate is not suitable for admission to Ph.D./M.Tech.(Res) programme of the Department (Give reason).

☐ Does not satisfy short listing criteria.

☐ Others (specify)

Head of the Department

Application for Admission to Ph.D./M.Tech.(Res) Programme

1.　Programme of study　　　　: 　☐ Ph.D.　　☐ M.Tech.(Res.)　　(Tick one)

2.　Department /Centres to which applying for　　: 　1._____

　　　　　　　　　　　　　　　2._____

　　　　　　　　　　　　　　　3._____
　　　　　　　　　　　　　　　(In order of preference)

3.　Name of the candidate in full (Block Capital letters)　:　_____

4.　Proposed Research Area (Broad area only)　:　_____

5.　Category of studentship　:　_____

1. Full Time student with Fellowship/Assistantship
2. Full time student with External Fellowship
3. Full time student without Fellowship
4. NIT faculty
5. NIT regular employees (non teaching)
6. Project scholars/staff of NIT
7. QIP Scholar
8. Sponsored student
9. Local Sponsored student (Part Time)

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1. Candidates applying for more than one department are required to submit photo copies of application form and certificates for each department applied for.

2. NIT regular employees must enclose administrative permission from the institute.

3. Project staff and fellows must enclose administrative permission from Dean (SRICCE); the project must have a tenure of at least 18 months (for Ph.D.) or 12 months (for M.Tech.(R)) beyond the expected date of joining.

4. In case of candidates belonging to categories 8 and 9, Part-II of the application form filled up by the sponsor must be attached.

6.   Address for Communication   :   _____

_____

Tel.No._____ Email _____

7.   Date of birth   :   ☐☐ ☐☐ ☐☐☐☐
                            d d   m m   y y y y

8.   Sex   :   Male / Female   9.   Marital status : Married / Single

10   Class of category   :   ☐ SC   ☐ ST   ☐ General

11.   Nationality: _____   12.   Mother Tongue   :   _____

13.   Academic career: (Enclose photo copies of the qualifying degree certificates and mark sheets/grade cards showing the percentage of marks (CGPA)

Name of Exams	Institute/University	Year of passing	Percentage of Marks/CGPA

14.   ☐ GATE / ☐ NET Score : Subject : _____ Score :_____ Year : _____

15.   Experience if any :

Organisation	Position	Duration	Nature of job

16.   Previous Research work and publication, if any : (Enclose copies of published or unpublished work)
_____
_____
_____

17.   Record of past study as a sponsored candidate, or other contractual obligation, if any :
_____
_____
_____

18.   ☐ I do not have a close relative among officers and faculty of NIT Rourkela.
       ☐ I am related to _____of _____ Department.

I do hereby declare that the information furnished in this application is true to the best of my knowledge and belief. If admitted, I shall abide by the rules and regulations of the Institute and Halls attached to it. If any information furnished in this application is found to be untrue, I am liable to forfeit the seat allotted to me any time in future and legal action be taken against me.

_____
Full signature of the Applicant

Enclosures: 1)   _____   3)   _____

               2)   _____   4)   _____

P A R T - II

For Sponsored candidates only
(To be filled up by the employer sponsoring the candidate)

1. Name of the Employer   :   _____

2. Address of Administrative
    Officer/HR Manager   :   _____

    _____

    _____

    Phone : _____Fax:_____

    Email : _____

3. Name of the employee seeking
    admission at NIT   :   _____

4. Designation (Regular)   :   _____

5. a)   First joined on (date)   :   _____

    b)   Holding the present   :   _____
          Position since (date)

    c)   Nature of Job   :   _____
          (R & D, Design, Production, Marketing, Administrative, Other)

    d)   Brief description of job   _____
          Assignment for the next
          Three years   :   _____
          (Relevant assignment only)

    _____

6. Reasons for sponsoring the   :   _____
    candidate to the M.Tech.(Res)/
    Ph.D.Programme   _____

    _____

7. The candidate is sponsored for : tick (√) only one :

    ☐ Full time study at NIT with deputation from the organization
         (2 years for M.Tech.(Res) / 3 years for Ph.D.)

    ☐ Study at NIT while working at our organization after satisfying the residential requirement. The
         candidate's job assignment will be worked out in consultation with NIT.

Dr. _____ will serve as his/her second supervisor, if accepted by NIT. A copy
of his bio data is enclosed.

Certified   that   Mr/Ms._____   employed   as
_____ in this organization is sponsored for admission to the
Ph.D./M.Tech.(Res) programme of NIT, Rourkela. He is employed in this organization for at least two years
in a regular cadre. During his studies at NIT, he/she will be on deputation from this organization to satisfy
the residential requirement. On completion of the programme he/she will continue to be employed by our
organization. He/she has signed an agreement with our organization for at least two (for M.Tech (R)) / three
(for Ph.D.) years on completion of the study programme. A copy of the agreement is enclosed.

Encl : As above

Signature of Competent Authority with seal

NATIONAL INSTITUTE OF TECHNOLOGY, ROURKELA

Scrutiny of Applications for Admission to Research Programmes

No.NITR/AC/_____/20___ /M/_____   **Date_____**

Applications for admission to ☐ Ph.D. and ☐ M.Tech (R) programmes are sent to your Department for scrutiny and recommendation for interview.

Number of applications : ☐

Please return them with your recommendation before _____/_____/_____.

(Recommendation should be given on the application forms and a summary be given in this sheet.)

Date of interview   : Date : ☐   Time : ☐

To   **Assistant Registrar(Academic)**

Head,_____ Department

PS : Please send your recommendation before the due date, so that candidates may be given enough time to   book tickets for the interview.

_____
Recommendation of the Departmental Academic Committee (PG & R)

	Ph.D.	**M.Tech. (R)**
1. Short listing criteria		
2. Serial Nos. recommended for interview (separate by comma)		
3. Serial Nos. not recommended for interview (reasons to be given in the application forms)		

Names & Signatures of DAC (PG&R) Members :

_____   _____   _____

_____   _____   _____

_____   _____
   Chairman, DAC (PG&R)   **Head of the Department**

To   Assistant Registrar (Academic)

_____
Approval of Dean (AA)
The above recommended candidates may be called for interview in the Department.

_____
Dean (Academic Affairs)

Form : NITR/AC/303

NATIONAL INSTITUTE OF TECHNOLOGY ROURKELA

(Academic Section)

RECOMMENDATION FOR ADMISSION TO RESEARCH PROGRAMMES

No.NITR/AC/_____/20___ /M/_____   Date_____

Based on your recommendation and the approval of Dean(AA), the applicants for admission to your department have been called for the selection process. Kindly conduct written and / or oral test as you think fit and forward your recommendation on this sheet to this office immediately after the process is completed.

Department   :   _____

Date and time of interview   :   Date : [   ]   Time : [   ]

Number of applicants
called for interview   :   Ph.D. : _____ M.Tech.(R) : _____

Encl : _____ applications.

                                                    _____
                                                    Assistant Registrar(AC)

To   Head, _____Department
_____

Recommendations of the Departmental Academic Committee (PG & R)

The departmental Academic Committee interviewed the candidates and recommends the following candidates, in order of merit, for admission :

Progra mme	SlNo	Application No.	Name	Category of student (1-9)	Specialisation	Remarks
Ph.D.	1.					
	2.					
	3.					
	4.					
	5.					
M.Tech. (R)	1.					
	2.					
	3.					
	4.					
	5.					

1. For sponsored candidates, the DAC is satisfied that the candidates meet the criteria set in the Ph.D. regulations of the institute. The proposed second supervisor from the place of employment meets the criteria set by the institute.
2. At least one faculty member of the department is willing to supervise each student if the student opts for him as supervisor.

Signatures of Members of DAC (PG & R)

_____   _____   _____

_____   _____   _____

_____   _____
Chairman, DAC (PG&R)   **Head of the Department**

Serial Nos. _____ in the list may be given admission

                                                    Dean (AA)

To   Asst. Registrar(Academic)

Note :   Category of student :
(1) Full time student with Institute Fellowship /Assistantship (2) Full time student with External Fellowship (3) Full time student without Fellowship (4) NIT faculty (5) NIT regular employees (Non teaching) (6) Project Scholars / Staff members (7) QIP Scholars (8) Sponsored student (9) Local sponsored student (Part Time)

Form : NITR/AC/304

NATIONAL INSTITUTE OF TECHNOLOGY
ROURKELA

OFFER OF ADMISSION TO THE Ph. D. /M.Tech. (R) PROGRAMME

No. : NITR/AC/_____/20___/M/_____   Date : _____

To

      _____

      _____

      _____

Sub: Offer of admission to ☐ **Ph.D.** ☐ **M. Tech. (Res) Programme**

Dear Student,

I am happy to inform you that, on the recommendation of the Departmental Academic Committee, the Institute is pleased to offer you admission to the Ph.D. / M.Tech (R) Programme in the Department of _____ under category "_____" with / without fellowship of Rs. _____ per month, and enhancement as per rules.

You are advised to report to the Head of the Department within one month of the date marked on the top of this letter. You are, however, advised to take admission as early as possible and enroll in course work, if the schedule permits.

After paying the required fees in the Institute Cash Counter, you may report to the Head of the Department. The Head of the Department will give you an opportunity to interact with all faculty members of the Department, who are available for supervising Ph.D. / M.Tech (Res) students. Please convey your area of interest and preference of supervisor to H.O.D. after meeting faculty members in your area of interest. The Head of the Department will assign you to a faculty member as Supervisor after taking into consideration the preferences of incoming students and faculty members.

You are required to bring the following documents with you while reporting for admission :
1. Original and one set of photocopies of qualifying degree certificate and mark sheet/grade sheet.
2. Original certificate for proof of age.
3. College leaving certificate in original.
4. Relieving letter from sponsor, Identity Card / Salary Slip (in case of sponsored candidates).
5. Admission fees for Rs. 7,500/- in the form of a Demand Draft in favour of Director, NIT, Rourkela, payable at SBI, NIT campus or any other bank at Rourkela.
6. 3 passport size photographs.

On arrival in NIT campus, you are advised to report to Warden, _____ Hall for temporary accommodation. Please present to him a copy of this admission letter, so that he will give you a room without charge for a maximum period of one week. You will, however, have to pay for your meal charges.

Looking forward to meeting you on your arrival at NIT campus.

With best wishes,

Yours sincerely

Assistant Registrar (Academic)

Copy to :   1) Head, _____ for necessary action please.
                2) Assistant Registrar (F&A).

Form : NITR/AC/305

NATIONAL INSTITUTE OF TECHNOLOGY
ROURKELA

APPLICATION FOR ENROLMENT IN PH.D./M.TECH.(RES.) PROGRAMME
(To be submitted on the day of joining)

1. Academic Programme- ☐ Ph.D. ☐ M.Tech.(Res.)   2. Department : _____

3. Full name of the candidate:Mr/Mrs/Miss_____
   (IN BLOCK CAPITAL)   (SURNAME)

4. Father's/Husband's Name : _____
5. Mother's Name : _____
6. Previous Names (if any) (e.g. maiden name): _____
7. Permanent Address:_____
   _____

8.(a) Date of Birth: _____/ _____/ _____   (b) Blood Group : _____

9. Nationality: _____   10. Caste Status: ☐ SC ☐ ST ☐ OBC ☐ General

11. Academic Qualification :

Standard	University / Institute	Degree	Year	% of Marks or CGPA	Broad Subjects of Study
H.S.C. / H.S.S.C.					
Graduation					
Post-Graduation					
Any other					

12. Relevant Working / Research Experience (if any)

Organisation	From	To	Position held
1.			
2.			

Copies of Documents (published or unpublished) may be enclosed for record.

13. Details of present employer (if any) and financial support.
    _____
    _____

14. Board area of research proposed: _____
    _____

15. Category of studentship : ☐
    1. Full time student with Institute Fellowship /Assistantship (Institute Scholar)
    2. Full time student with External Fellowship (UGC/CSIR etc.)
    3. Full time student without Fellowship (self financed/self supported)
    4. NIT faculty
    5. NIT regular employees (Non teaching)
    6. Project Scholars (JRF/SRF/RA etc.) or project staff members
    7. QIP Scholars
    8. Sponsored student (Institute/Research Organisation/Industry)
    9. Sponsored local student (Part Time)

Signature of the Candidate

The application of the Candidate _____ is verified in the Department.
(*supporting documents for items 8(a), 10, 11, 12,13 to be seen*)

Chairman, Departmental Academic Committee   **Signature & Seal of HOD**
                                                                      P.T.O

-2-

As per recommendation of DAC (PG&R) the following faculty members will serve as Supervisors of the Candidate :

1. _____ 2. _____

(*If the candidate is a sponsored one intending to carry out the main part of his work at his/her place of employment, the second supervisor must be from the concerned organisation. The DAC should be satisfied that the proposed second supervisor meets the criteria set under the regulations.*)

The following members are recommended by DAC (PG&R) for the Doctoral/Masters Scrutiny Committee of the student:

1. _____ *Head of the Department

2. _____ Supervisor 1.

3. _____ Supervisor 2.

4. _____ (From the Department where the candidate is enrolled.)

5. _____ (From the same or a different department)

*If Head of the Department is a supervisor, the Chairman will be nominated by the Dean (AA).

_____   _____   _____   _____   _____   _____   _____
                            Members, DAC (PG&R)   **Head of the Department**

To   **Dean (AA)**

1. Prof. _____, of the Department of _____ is nominated as member of DSC.

2. Prof _____, of the Department of _____ is nominated as Chairman because the HOD is a supervisor.

3. The structure of the DSC / MSC as recommended by the DAC (PG & R) is approved as such / approved with the following modification:

4. The admission with all details may please reported to the Senate at its next meeting.

_____
Dean (AA)

To   **Asst. Registrar (Academic)** for records and necessary action

Amount of fee paid _____ and the Institute Receipt No. & date _____.
     (Attach photo copy of the receipt)

The student is assigned the following Roll Number :

Degree	Year	Discipline (Branch)	category	Roll No.

Note: (1) Roll No will be a serial number for the entire Institute for the Academic year.
     (2) The "year" will be the year at the beginning of the academic year, i.e., on July 1.
          For example, Academic year 2007-08 will be denoted by 07.

  (a) Assigned to Hall: _____

  (b) Permitted to stay outside Hall (Yes / No):
       If yes, Address: _____

The enrolment of the student is approved with effect from today [_____]

Date   **Asst. Registrar (Academic)**

To   **HOD, _____**

CC: 1. Student concerned (*through Head of the Department*)
        2. Superintendent (Academic Section) for records

NATIONAL INSTITUTE OF TECHNOLOGY ROURKELA

Form : NITR/AC/306

No. : NITR/AC/_____/20___/M/_____   Date : _____

OFFICE ORDER

ENROLMENT OF Ph. D. /M.Tech. (R) STUDENT

The undersigned is pleased to convey the approval of competent authority for enrolment of the following student in the Research Programme of the Institute :

1. Roll No. allotted   :

2. Date of Enrolment   : _____

3. Academic Programme   :   Ph.D.   M.Tech.(R)

4. Name of Candidate   : _____

5. Previous Name (if any)   : _____

6. Father's/Husband's Name: _____

7. Permanent Address   : _____

8. (a) Date of Birth :_____ (b) Blood Group □ (c) Nationality : _____

9. Department to which admitted: _____

10. Category   :   SC   ST   OBC   General

11. Category of studentship   : _____

12. Highest Academic qualification : _____

13. Hall allotted   :   _____

14. Permitted to stay outside hall: Yes/No

15. Supervisors   :(1) _____*(Principal Supervisor)*

                             (2) _____*(Co-Supervisor)*

16. For sponsored student   :

    (a) Place of Employment :   _____

    (b) The student is / is not permitted to take withdrawal after satisfying the course and residence requirements.

17. Doctoral Scrutiny Committee of the student:

    1) Head of the Department of _____   Chairman

    2) Prof _____   Principal Supervisor

    3) Prof _____   Co-Supervisor

    4) Prof _____   Member

    5) Prof _____   Member

    6) Prof _____   Member

18. The Head of the Department is requested to proceed with provisional registration and other action as per Ph.D. regulations.

_____
Assistant Registrar (Academic)

1. Student concerned   6. (For sponsored students) Employer [with
2. All members of DSC   address:]
3. Head, Department of _____
4. Warden, _____ Hall
5. Head, NIT Library

Note: Supervisors are requested to advise the student on the courses to attend provisionally included a course on Seminar and Technical Writing.